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A. CLOSURE OVERVIEW

1. Introduction

- a. This closure plan addresses closure of 43 mixed residue container storage area units that are no longer intended for storage. These units are listed in Table 1. Section B of this plan contains descriptions of the standard closure activities, and Section C contains unit-specific information for each of the 43 units.
- b. Rocky Flats Environmental Technology Site (RFETS) personnel will verify that the units undergoing closure have met the closure performance standard, as defined in Section 5 of this plan.

2. Facility Contact

The RFETS facility contact for closure plan activities is:

Manager, RFETS Field Office, at the following mailing address:

U.S. Department of Energy RFETS Field Office P.O. Box 928 Golden, Colorado 80402-0928 Phone: (303) 966-2025

3. Closure Notification

Closure of the units in this plan will be conducted as partial closure of the mixed residue container storage units. Notification to the Director of the intent to close these units will be submitted to the Colorado Department of Public Heath & Environment (CDPHE) at least 45 days prior to the planned start of closure activities.

4. <u>Regulatory Requirements</u>

- a. A closure plan for closure of the 43 mixed residue storage units at the RFETS is required pursuant to 6 Colorado Code Regulations (6 CCR) 1007-3, Part 265 of the Colorado Hazardous Waste Regulations. This plan addresses the following Colorado Hazardous Waste Regulations: Part 265, Subpart G Closure and Post-Closure, Sections 265.110 through 265.120.
- b. No demonstration of financial responsibility is required because, under current regulations, compliance with Part 266 Subpart A Financial Requirements is not required for government-owned facilities.

5. Closure Performance Standard

- a. This closure plan provides for closure of the mixed residue units listed in Table 1 in a manner that minimizes the need for further maintenance. It also controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated runoff or waste decomposition products, to the ground, to surface waters or to the atmosphere.
- b. The closure performance standard for used rinsate from decontamination of secondary containment in indoor storage areas shall be as follows:
 - (1) Non detectable levels for the following organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - (2) Does not exhibit any characteristic of a hazardous waste as defined in 6 CCR 1007-3 Part 261, Subpart C, and
 - (3) Levels of Toxicity Characteristic (TC) for the following metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) are at or below the background level in the unused rinsate solution.
- c. Selection of the parameters for which the used rinsate will be analyzed will be based on the specific wastes stored at the unit. These wastes are specified in Section C of this plan.
- d. The closure performance standard for gloveboxes shall be as follows:

The glovebox surface will be visually inspected to determine if the surfaces are clean and dry. A clean surface will be defined as free of all visible hazardous waste or contamination, except that residual staining consisting of slight streaks or minor discoloration, and waste in cracks, crevices, and pits limited to 5 percent of each square inch may be present.

6. Description of Units Requiring Closure Plans

a. Hazardous and mixed wastes are generated primarily in the production and maintenance areas of the RFETS. The mixed waste management units included in this plan consist of indoor room and vault container storage units and gloveboxes.

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- b. The container storage area units listed in Table 1 have been categorized for closure as follows:
 - (1) those units for which DOE may need to defer initiation of closure (e.g., those units which contain Special Nuclear Material or piping from hazardous waste tank systems);
 - (2) those units for which DOE can begin closure upon approval of a closure plan and can complete closure within 180 days; and
 - (3) those units for which DOE can begin closure upon approval of a closure plan but may need an extended period of time to complete closure activities.
- c. Detailed procedures for the closure of the different types of container storage area units may be found in Section B.

7. <u>Closure Schedules</u>

a. This closure plan contains the following closure schedule information for each unit: unit description, identification of closure category (from 6.b. above), closure schedule, and closure personnel.

b. Closure Personnel

- (1) Table 1 identifies the number of personnel required for closure of each unit in accordance with the schedule, and with safety and regulatory standards. Personnel will be qualified workers, trained in basic mechanical skills, decontamination techniques and safety procedures necessary to accomplish closure. The lists do not specify management personnel beyond the work-area supervisor, nor any health and safety personnel. Minimum crews (4 for mixed waste areas) are required for health and safety requirements.
- (2) If it is found that decontamination or other closure activities require more time than anticipated, additional qualified personnel may be required to ensure implementation of closure within the approved time schedule.

c. <u>Unit Closure Schedule</u>

- (1) The closure of each mixed residue unit and associated equipment will be accomplished in accordance with this plan.
- (2) These areas will be closed in a manner to ensure that the closure performance standard, specified in Section A.5. will be met.

- (3) RFETS has limited resources to implement closure activities i.e. properly trained personnel and critically safe equipment; therefore, units have been grouped together so that these resources can be used effectively. Table 1 identifies the appropriate group for each unit.
- (4) Closure of each mixed residue unit in this plan will proceed according to the group's schedule provided in Figure 1. Groups have been scheduled based on expected availability of resources and the time necessary to complete engineering activities.
- (5) Within 60 days following completion of closure of each unit, an independent Professional Engineer, registered in the State of Colorado, will submit certification of closure, based upon compliance with the approved closure plan, to the Director.

Order of Unit Closure

Closure of the following units will be initiated upon approval of this plan in accordance with the following schedule:

- a. The first group of units to be closed will be those units which can be closed within 180 days of approval of this plan. (see page 3, Section 6.b.(2))
- b. The second group of units to be closed will be those units for which closure can begin within four months after approval of this plan and can be completed within 180 days. (see page 3, Section 6.b.(2))
- c. The third group of units to be closed will be those units for which closure can begin within eight months after approval of this plan and can be completed within 180 days. (see page 3, Section 6.b.(2))
- d. The fourth group of units to be closed will be those units for which closure can begin within one year after approval of this closure plan but require up to 360 days to complete. (see page 3, Section 6.b.(3)). The schedule is based on the need to integrate implementation of unit-specific closure activities with other essential building activities necessary to maintain safe site functions.
- e. The fifth group of units to be closed will be those units for which closure is to be deferred (e.g., those units with Special Nuclear Material, hazardous waste tank systems, etc.) but can be closed within 180 days. (see page 3, Section 6.b.(1)). A demonstration with respect to those units for which initiation of closure must be deferred or for which more than

180 days to complete closure activities is necessary is set forth on a unitspecific basis in the unit information sheets.

9. General Closure Activities

- a. Maximum Waste Inventory
 - (1) The maximum inventory capacity of each of the units under normal operating conditions is listed in Section C in this plan.

b. Final Closure of Units

- (1) This section presents programs for the final closure of the 43 mixed residue units listed in Table 1. The closure plan is based on the assumption that, as part of closure, each unit will be decontaminated to levels consistent with the applicable closure performance standard specified in Section A.5.
- (2) The plan also contains the assumption that the plant waste management and treatment facilities will be available to receive the area inventory and the cleanup waste.
- (3) The disposition of any hazardous or mixed waste from a unit undergoing closure will depend on the exact characteristics of the waste and the permitted treatment and disposal capabilities of all available commercial and DOE facilities. The disposition of all hazardous and mixed waste will fully comply with all local, State and Federal Hazardous Waste Regulations applicable at the time of disposal.
- (4) The disposition/destination of drummed hazardous waste will depend upon the type of waste present in the drum. Treatment of hazardous wastes at RFETS will be the preferred waste treatment alternative. If on-site treatment is not feasible, then the disposition of each waste will depend upon the characteristics of each waste and the capabilities of other designated treatment, storage, and disposal facilities. All wastes shall be disposed of properly.
- (5) All mixed low-level radioactive wastes will be disposed of at the DOE Nevada Test Site (NTS) or another approved facility. All TRU-mixed wastes will be disposed of at the DOE Waste Isolation Pilot Plant (WIPP) or another approved facility. If no DOE facilities can accept these wastes, then commercial facilities will be considered. Finally, if no facilities exist for shallow or deep burial of this waste, or other off-site waste disposal, long-term monitored storage of the waste will be conducted at RFETS until

a disposal facility is approved. The Director shall be notified if long-term storage is the only waste management option for RFETS low-level mixed waste and obtain the Director's approval for this waste management option PRIOR to exceeding approved permitted or interim status storage capacity for any waste type.

(6) The approximate distances to various off-site disposal facilities are listed below.

APPROXIMATE ONE-WAY DISTANCES TO DISPOSAL FACILITIES

Facility								I)is	ita	ance
									<u>(r</u>	n	iles)
DOE Nevada Test Site, Nevada									٠		986
DOE Waste Isolation Pilot Plant											567

- All cleaning waters generated during closure decontamination activities that are compatible with the RFETS waste treatment facilities will be treated onsite. Wastes compatible with the RFETS waste treatment facilities currently include high and low pH solutions, radioactive solutions, and solutions contaminated with inorganics. Wastes that are reactive, ignitable, or contain high concentrations of organics are incompatible with the RFETS waste treatment facilities. It is currently anticipated that all cleaning wastes will be compatible with the RFETS waste treatment facilities.
- (8) Some aqueous wastes in the units may contain high concentrations of organics. A wastewater pretreatment unit may be installed at the container area being closed or at Building 374 to remove organics from wastewater prior to its discharge to the Building 374 wastewater treatment system. The following discussions assume any wastewater containing organics will be pretreated prior to its discharge into the Building 374 wastewater treatment system. The types of waste generated during cleaning will be dependent on the method used.

10. Soil Sampling - Exemption

Each unit identified for closure was evaluated against soil sampling requirements summarized in Figure 1, Soil Sampling Flow Chart, in Part X, Soil Sampling in the RFETS RCRA Part B Operating Permit. As all units are indoors, with no soil immediately adjacent to the unit and with no apparent spills or releases to soil, all units were determined to be exempt from soil sampling requirements.

11. Criteria for Determining Post-Closure Care

a. The criteria used to determine if a unit undergoing closure will be certified closed or follow post-closure procedures will be based upon the continued presence of RCRA contaminants above the levels identified in the closure performance standard. If clean closure cannot be achieved, CDPHE approval will be requested to defer further closure action until decontamination and decommissioning (D&D) activities in the building. At that time, alternate inspection methods and schedules for the unit may be proposed.

12. Recordkeeping

The following closure records shall be maintained at the facility during closure activities and for a minimum of 3 years following closure certification:

- Record of sampling activities (date, number, and type).
- Results of screening activities, and sampling of decontamination rinse waters.
- Other documentation which verifies that the Permittee is following the approved closure plan.
- Records of volumes of hazardous waste generated during closure.

13. Amendment of Plan

The closure plan will be amended whenever changes in operating plans or facility design affect the closure plan in accordance with 6 CCR 1007-3 Section 264.112, or a change in the expected initiation of closure occurs.

In performance of closure under this plan, unexpected events which are identified during the implementation of required closure activities may also require an amendment of the existing closure plan. Should an event occur requiring closure plan modification, a request for modification of the closure plan will be made within 30 days of identification of the event that causes modification of the closure plan to be necessary, as required by 6 CCR 1007-3, Section 264.112(c)(3).

B. CONTAINER STORAGE AREAS - STANDARD CLOSURE ACTIVITIES

- a. Closure activities will be performed in a manner to achieve the objectives of the closure performance standards. A work package or equivalent that includes the engineering information as well as health and safety protection information will be developed prior to closure of the unit. This work package will be developed in accordance with appropriate RFETS policies and procedures. At all times during closure activities, there will be strict adherence to all RFETS safety and security procedures which will be detailed in the work package.
- b. The closure of container storage areas will commence after approval of this plan. Inventory remaining in the area will be transferred to another permitted container storage area or disposed of offsite in accordance with RFETS procedures.
- c. The 43 mixed residue container storage areas covered by this closure plan can be grouped into two similar unit types which can be closed in the same manner: indoor storage units and gloveboxes. The following paragraphs discuss the general procedures necessary to successfully close each of the types of container storage areas.

1. <u>Indoor Storage</u>

- a. Removal of waste inventory will follow normal operating procedures for the units. Any remaining nonhazardous containers of waste will be transferred to another location during closure activities.
- b. The concrete floors will be swept to remove dust and debris, and cleaned using an appropriate decontamination solution. Decontamination procedures are described in Part IX, Decontamination, of the facility RCRA Part B operating permit. After washing and rinsing, the rinsate will be sampled and analyzed. The used rinsate solution sample results will be compared to the closure performance standard. The remaining rinsate will then be removed by a vacuum unit, and placed in containers for treatment in Building 374 or 774. Up to approximately 35 gallons of rinsate may be generated while completing a single wash and rinse cycle on 150 square feet of the unit.
- c. Decontamination procedures shall be repeated at units undergoing closure until verification test results meet the applicable closure performance standards. If the unit cannot meet the closure performance standards, the equipment and structures will continue to be managed as hazardous or mixed waste and a decision made whether to continue rinsing or to apply for post closure care authorization.

2. Gloveboxes

- a. Gloveboxes at RFETS will be used to provide containment for radioactivity, but ultimately will be stripped out and removed as radioactive waste. Prior to final stripout, some RCRA gloveboxes may be reused for some other non-RCRA purpose after RCRA closure has been completed. The closure procedure described in section c presents RCRA closure activities that will occur for both situations.
- b. The gloveboxes covered by this closure plan were only used for storage of characteristic hazardous waste. None of the gloveboxes covered by this closure plan were used for storage of listed hazardous waste. Thus, these gloveboxes can be closed according to the procedures described in section c when the gloveboxes are no longer needed for hazardous waste storage. These gloveboxes provide secondary containment for containers. Figure 2 presents a decision flow diagram for the glovebox closure activities described below.

c. Closure Activities

- 1. Removal of waste inventories and other glovebox equipment will follow existing operating procedures.
- 2. After removal of the waste, the glovebox surfaces will be visually inspected to determine if the surfaces are clean and dry. A clean surface will be defined as free of all visible hazardous waste or hazardous contamination, except that residual staining consisting of slight streaks or minor discoloration, and waste in cracks, crevices, and pits limited to 5 percent of each square inch may be present.
- 3. Wiping or other cleaning methods may be employed to remove residual waste in order to obtain a clean, dry surface. After a clean, dry surface is achieved, the glovebox will be considered RCRA clean closed, and either will be reused for another onsite DOE purpose or left in place for eventual stripout.
- 4. If a clean surface cannot be achieved, CDPHE approval will be requested to defer further closure action until stripout of the glovebox during decontamination and decommissioning (D&D) activities in the building. At that time, alternate inspection methods and schedules for those gloveboxes may be proposed.
- 5. Stripout of the gloveboxes will take place when D&D of the process equipment in the building occurs. Prior to stripout, an assessment will be completed to ensure that the waste to be

generated will be managed in accordance with applicable regulations, and that waste acceptance criteria are taken into account for the designated disposal facility. During stripout, the gloveboxes will be declared as solid waste and a hazardous waste determination will be made for those gloveboxes that did not meet the standard described in section c(2) above for clean surfaces. Gloveboxes previously certified as clean-closed will be packaged as non-hazardous TRU or low level waste, depending on radioactivity level. Gloveboxes containing lead shielding or leaded glass will have the lead removed during stripout. The lead will either be recycled, reused, or managed as RCRA-regulated hazardous waste.

d. This approach was chosen to minimize waste generated in the closure process. The proposed method will be protective of human health and the environment, because the waste is destined for off-site disposal at a radioactive or mixed waste disposal facility.

C. <u>CONTAINER STORAGE AREAS - UNIT-SPECIFIC CLOSURE INFORMATION</u>

- 1. This section contains unit specific information sheets and layout drawings for each unit to be closed which identifies the maximum capacity of waste ever stored in the unit.
- 2. Table 1 identifies the unit type and provides unit-specific closure information for each unit. The unit type refers to the closure activity category of each unit as described in Section B.
- 3. Figure 1 identifies a closure schedule for each group of unit closures. The five groups include:
 - 1) Closure within 180 days of approval of this plan,
 - 2) Closure within 180 days starting within 4 months after approval of this plan,
 - 3) Closure within 180 days starting within 8 months after approval of this plan,
 - 4) Closure within 360 days starting within one year after approval of this plan, and
 - 5) Closure within 180 days starting after a deferral period related to a future event.

Unit Number:

90.4

Building:

371

Room:

3543

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

4,400 gallons

Secondary Containment Type:

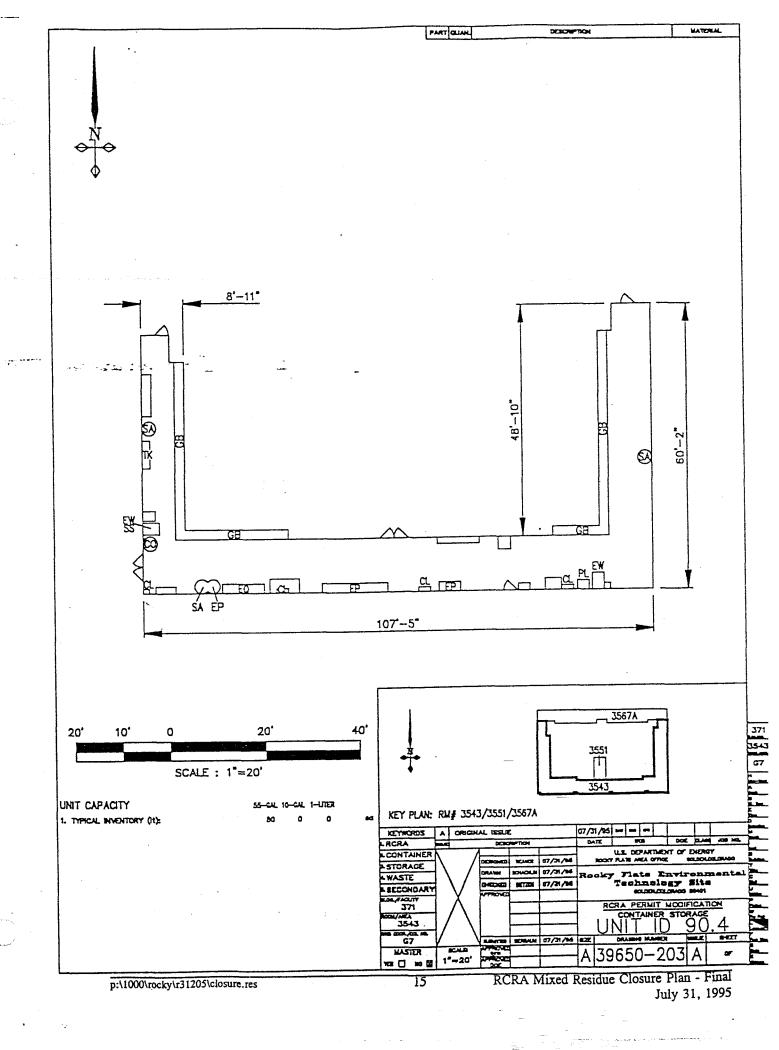
Coated Concrete

Drawing Number:

39650-203

Unit Specific Information:

- 1. Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems. Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.8

Building:

371

Room:

3567A

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

4,070 gallons

Secondary Containment Type:

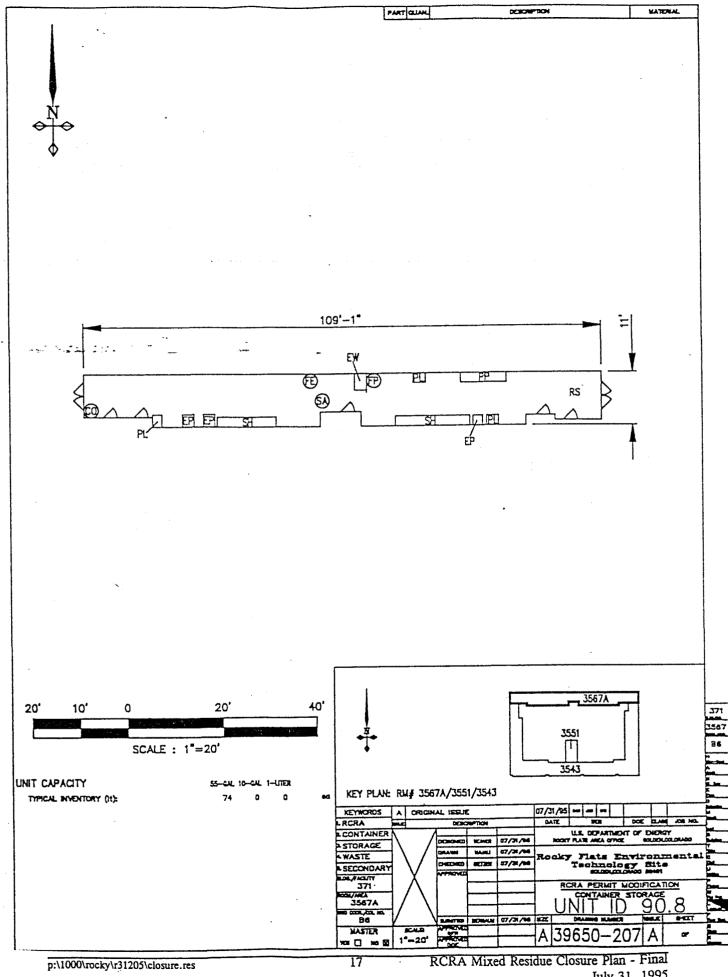
Coated Concrete

Drawing Number:

39650-207

*Unit-Specific Information:

- Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems.
 Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.12

Building:

371

Room:

1101

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

5,005 gallons

Secondary Containment Type:

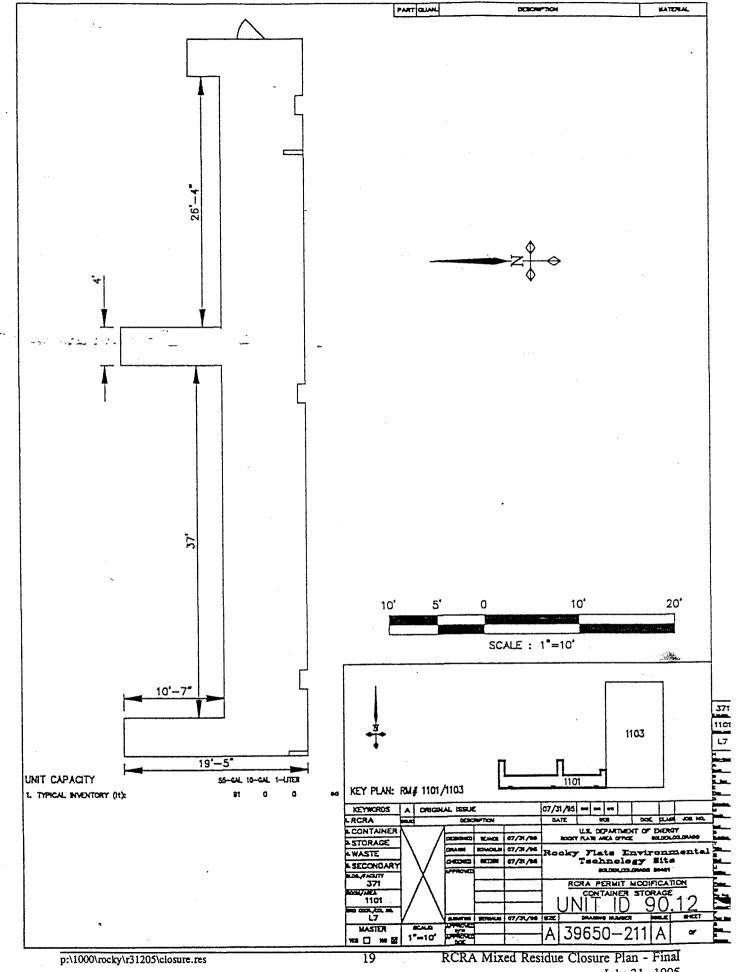
Coated Concrete

Drawing Number:

39650-211

-. Unit Specific Information:

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this Unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



July 31, 1995

C

Unit Number:

90.14

Building:

371

Room:

1111

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

2,915 gallons

Secondary Containment Type: Coated Concrete

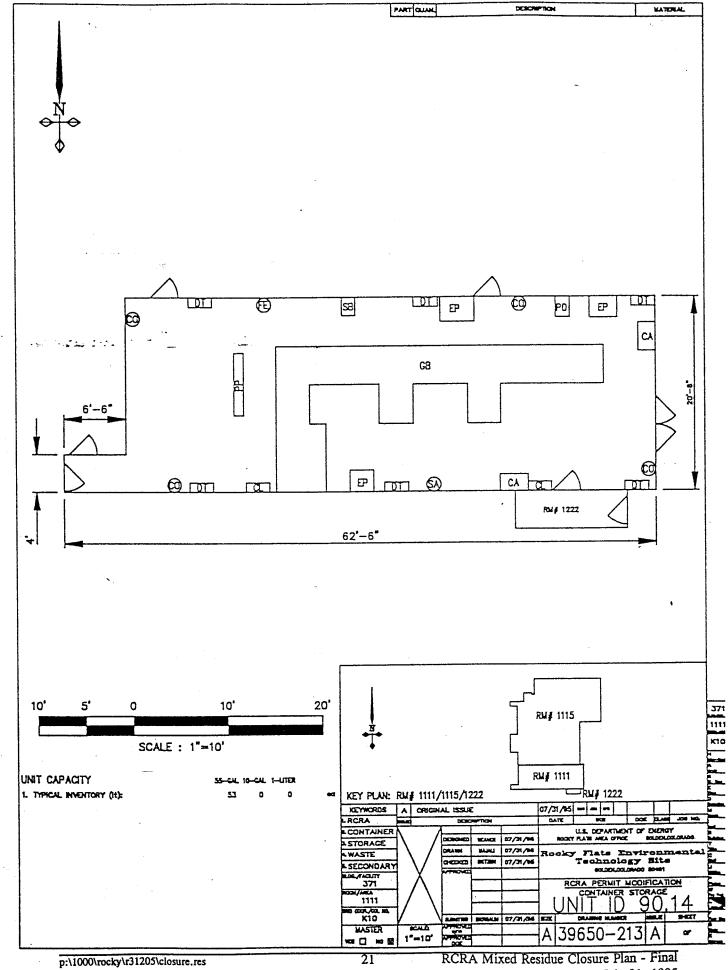
Drawing Number:

39650-213

... Unit Specific Information:

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- 1. Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems. Closure of this unit will commence after the hazardous waste piping in this room is removed, in order to avoid duplicate cleaning of the floor which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris. b.
 - Clean the floor using an appropriate decontamination solution. c.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



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Unit Number:

90.15

Building:

371

Room:

1208

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

4,015 gallons

Secondary Containment Type:

Coated Concrete

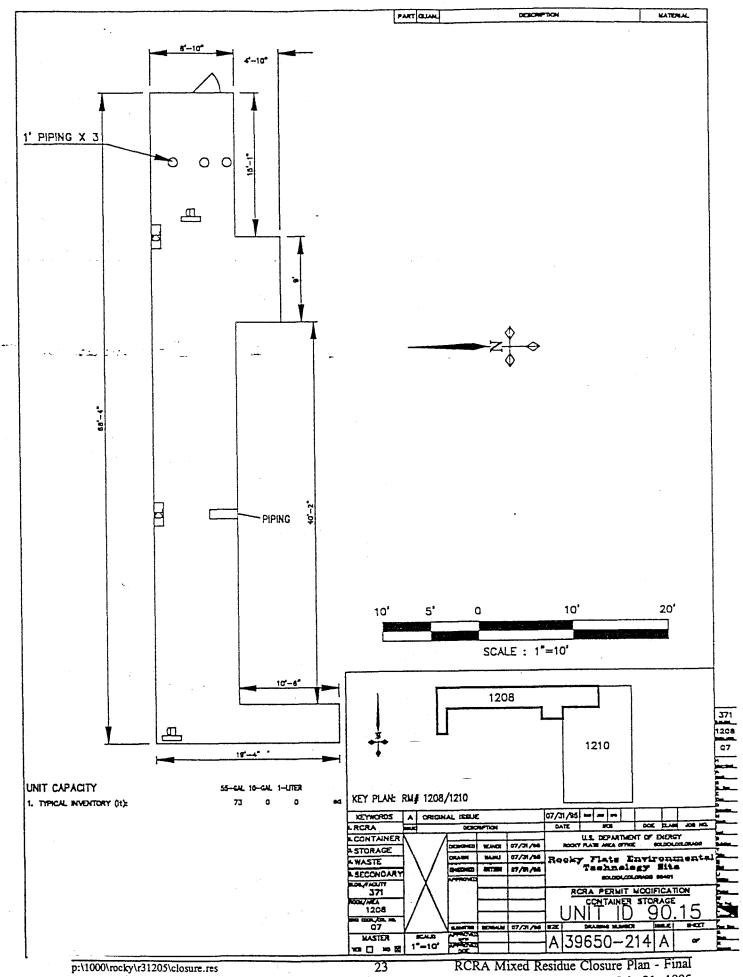
Drawing Number:

39650-214

... Unit Specific Information:

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will
 be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance
 standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C. and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third-rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.

12



July 31, 1995

Unit Number:

90.19

Building:

371

Room:

1115

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

1,595 gallons

Secondary Containment Type:

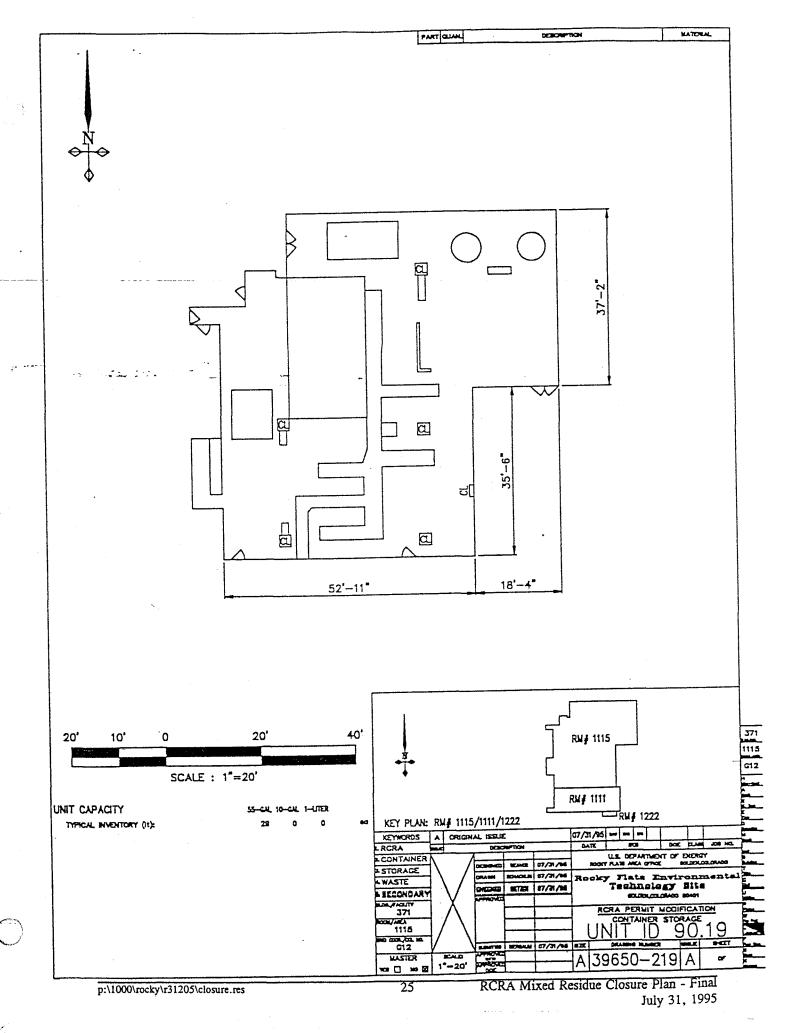
Coated Concrete

Drawing Number:

39650-219

... Unit-Specific Information:

- Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems.
 Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.21

Building:

771

Room:

149

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

3,190 gallons

Secondary Containment Type:

Coated Concrete

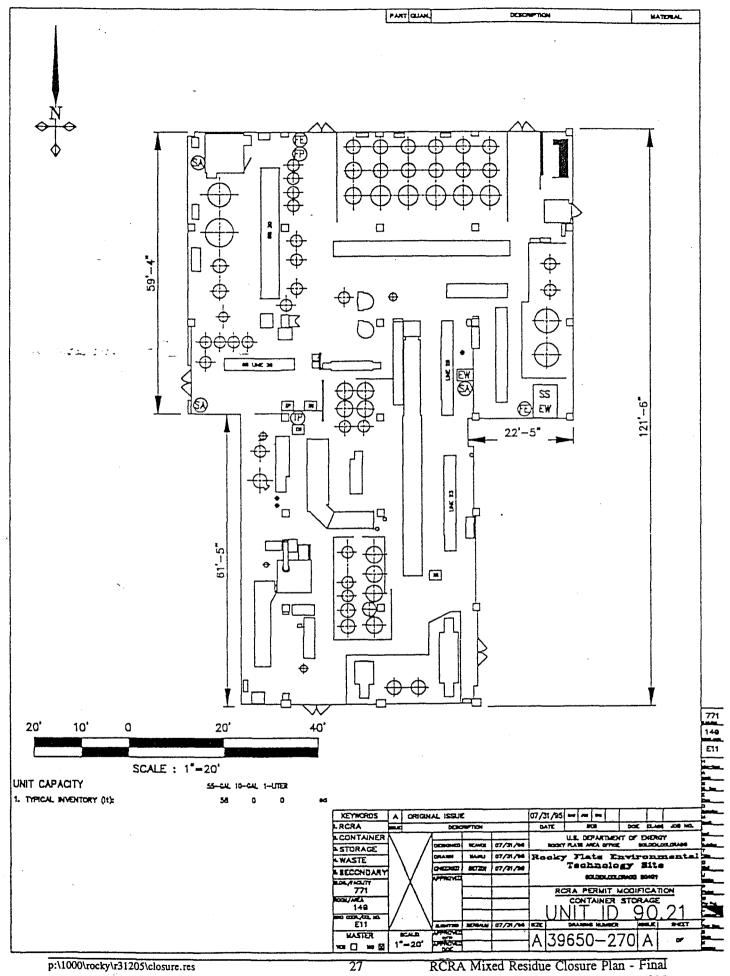
Drawing Number:

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39650-270

Unit Specific Information:

- Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems.
 Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C. and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



July 31, 1995

Unit Number:

90.21

Building:

771

Room:

149

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

401 gallons

Secondary Containment Type:

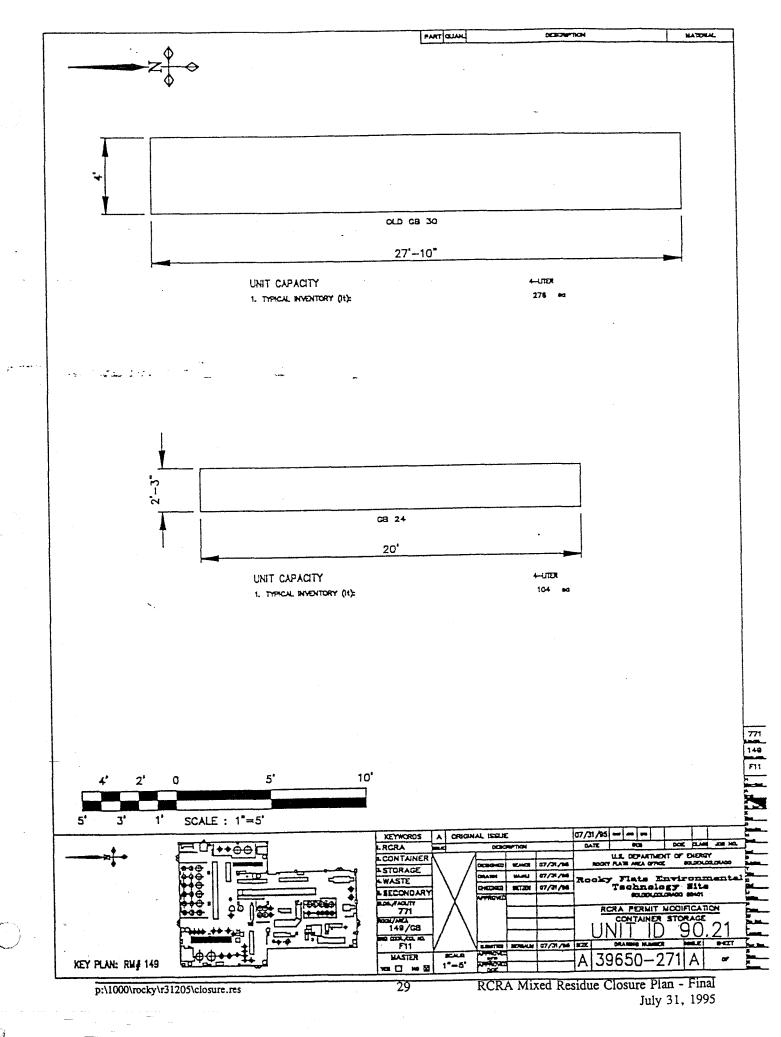
Glovebox

Drawing Number:

39650-271

... Unit Specific Information:

- 1. Initiation of closure is deferred due to the role of the glovebox unit as secondary containment for hazardous waste tanks and ancillary piping. Closure of this unit will commence after the hazardous waste piping in this glovebox is removed in order to avoid duplicate cleaning of the glovebox floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit included characteristic wastes, but not listed wastes.
- 3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:
 - a. Remove waste inventory and other materials from the unit.
 - b. Inspect the glovebox surface to determine if it is clean and dry.
 - c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.



Unit Number:

90.22

Building:

771

Room:

114

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Maximum Capacity:

12,407 gallons

Secondary Containment Type: Coated Concrete

Drawing Number:

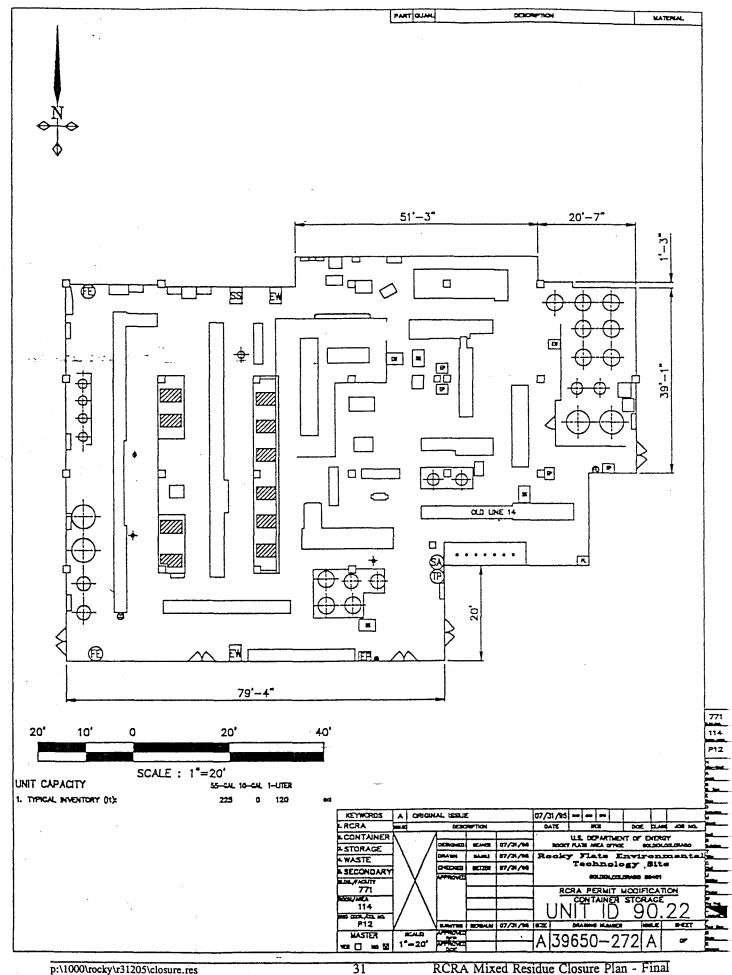
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39650-272

Unit Specific Information:

p:\1000\rocky\r31205\closure.res

- 1. Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems. Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - Clean the floor using an appropriate decontamination solution.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



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RCRA Mixed Residue Closure Plan - Final July 31, 1995

Unit Number:

90.22

Building:

771

Room:

114

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Wast

Maximum Capacity:

63 gallons

Secondary Containment Type:

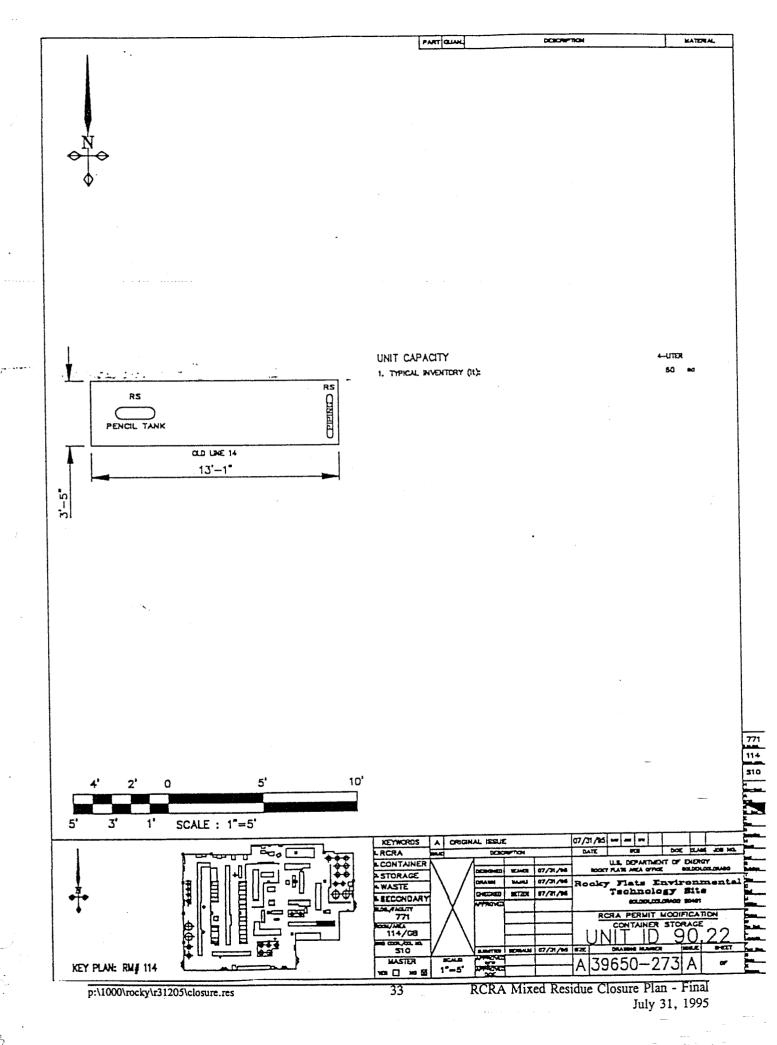
Glovebox

Drawing Number:

39650-273

-Unit Specific Information:

- 1. Initiation of closure is deferred due to the role of the glovebox unit as secondary containment for hazardous waste tanks and ancillary piping. Closure of this unit will commence after the hazardous waste piping in this glovebox is removed in order to avoid duplicate cleaning of the glovebox floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit included characteristic wastes, but not listed wastes.
- 3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:
 - a. Remove waste inventory and other materials from the unit.
 - b. Inspect the glovebox surface to determine if it is clean and dry.
 - c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.



Unit Number:

90.28

Building:

707

Room:

E&F Hallway

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

5,170 gallons

Secondary Containment Type:

Coated Concrete

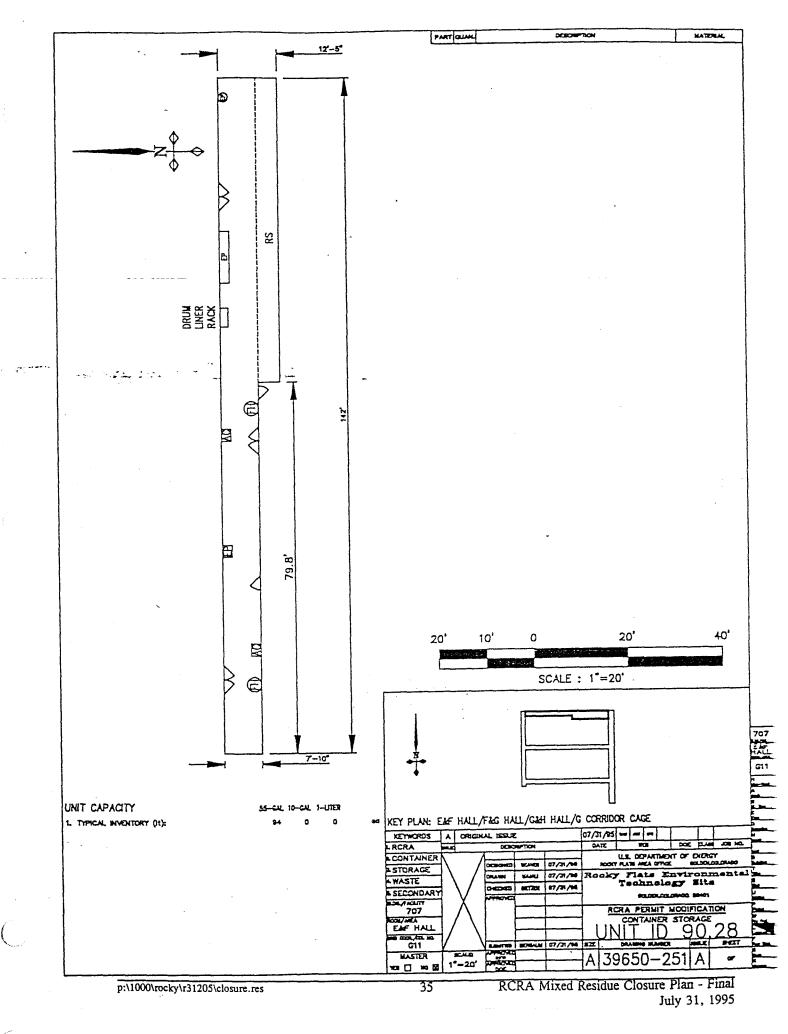
Drawing Number:

39650-251

-- Unit Specific Information:

1. Closure activities will be completed within 180 days following approval of the closure plan.

- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.29

Building:

559

Room:

101

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

106 gallons

Secondary Containment Type:

Glovebox

Drawing Number:

39650-241

- Unit Specific Information:

1. Closure activities will be completed within 180 days starting within 4 months of closure plan approval.

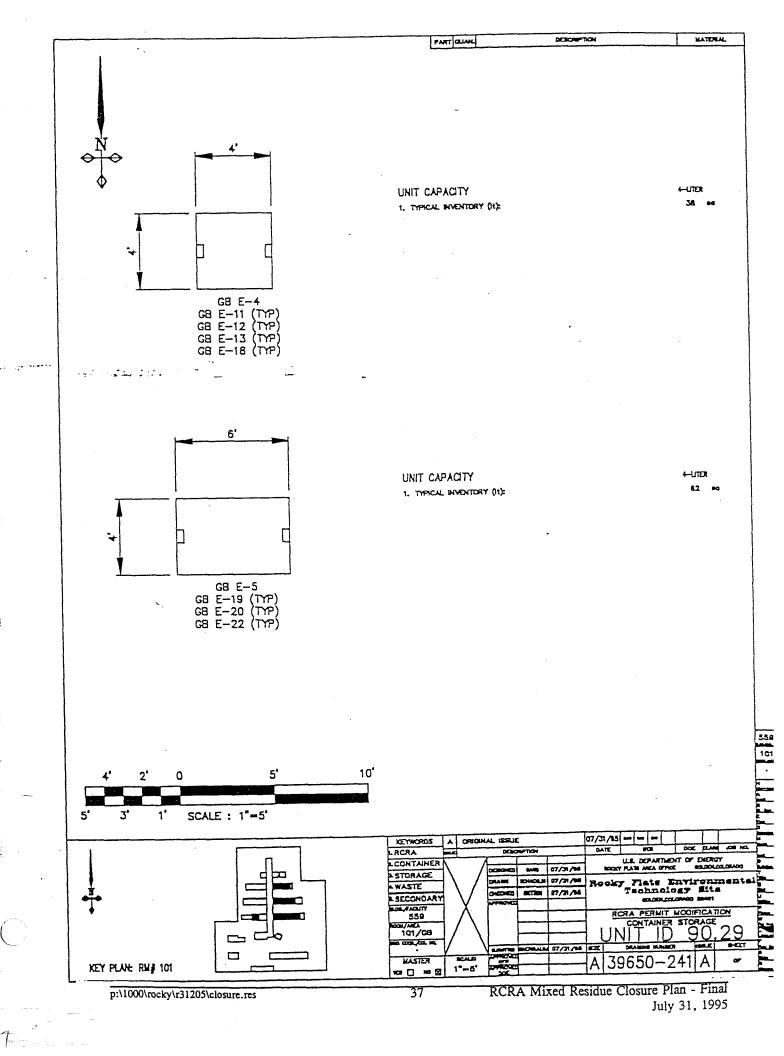
2. Wastes stored in this unit included characteristic wastes, but not listed wastes.

3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:

a. Remove waste inventory and other materials from the unit.

b. Inspect the glovebox surface to determine if it is clean and dry.

c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.



Unit Number:

90.3

Building:

371

Room:

3337

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

17,600 gallons

Secondary Containment Type:

Coated Concrete

Drawing Number:

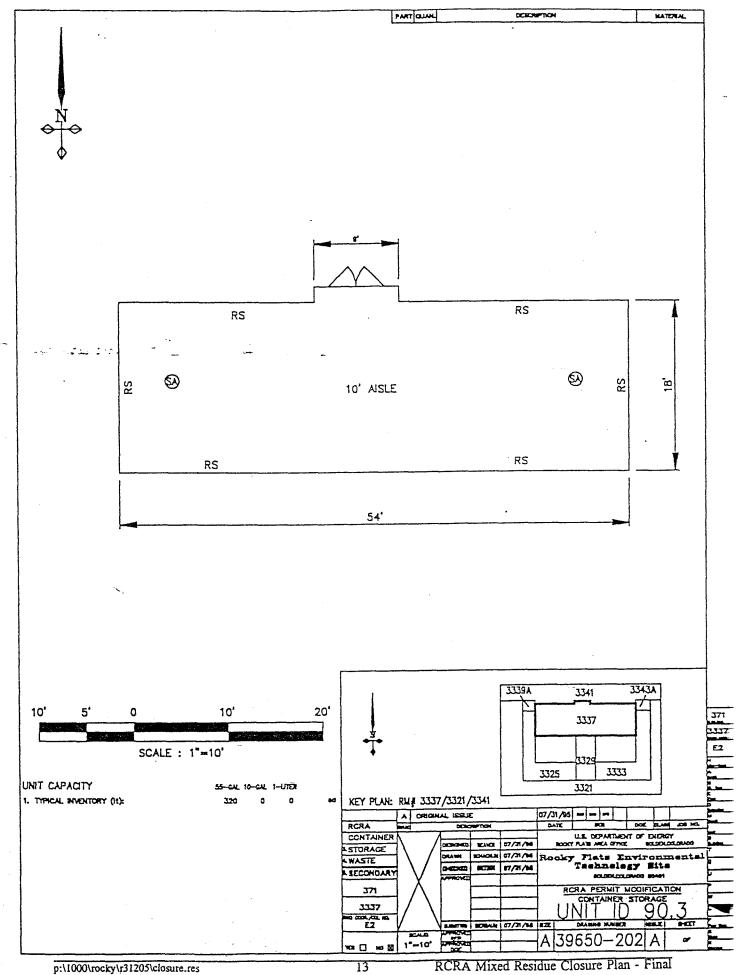
39650-202

Unit Specific Information:

1. Closure activities will be completed within 180 days following approval of the closure plan.

- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard:
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C. and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.

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RCRA Mixed Residue Closure Plan - Final July 31, 1995

£-3

Unit Number:

90.31

Building:

771

Room:

179

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

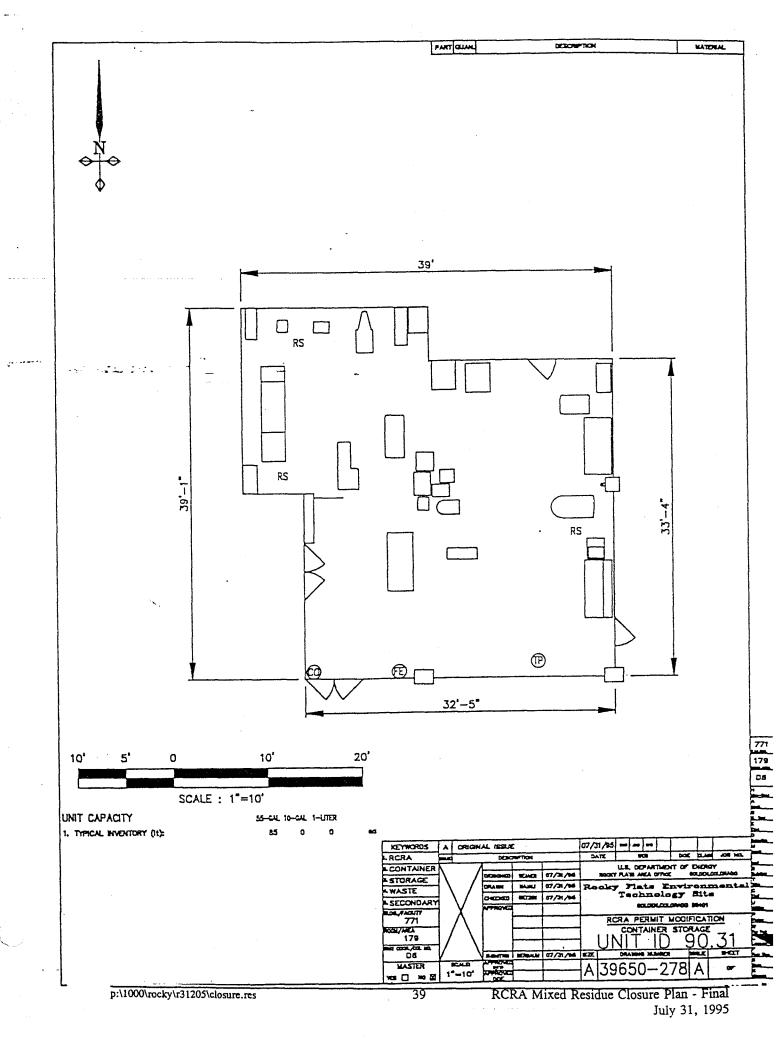
4,675 gallons

Secondary Containment Type: Coated Concrete

Drawing Number: ت المراجع المواقع المو

39650-278

- 1. Closure will be completed within 360 days starting within one year of closure plan approval due to the present condition of the floor and the presence of large volumes of equipment in the room.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris. b.
 - Clean the floor using an appropriate decontamination solution. c.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.34

Building:

771

Room:

249

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

1,498 gallons

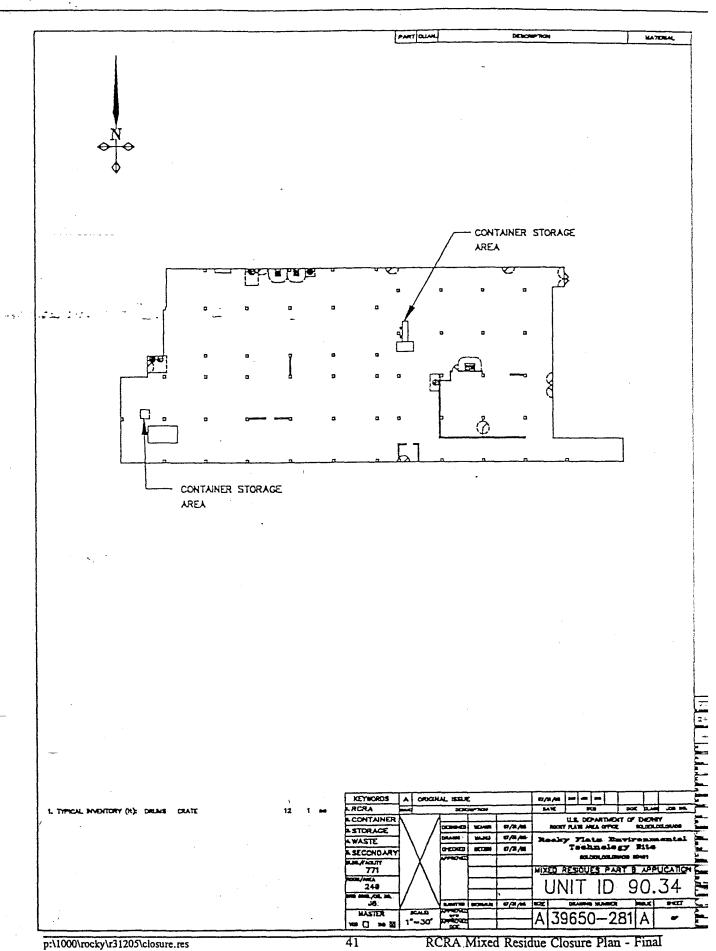
Secondary Containment Type: Coated Concrete

Drawing Number:

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39650-281

- 1. Closure will be completed within 360 days starting within one year of closure plan approval due to the presence of extensive equipment which will prolong closure activities.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris.
 - Clean the floor using an appropriate decontamination solution.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



July 31, 1995

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Unit Number:

90.37

Building:

779

Room:

131

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

660 gallons

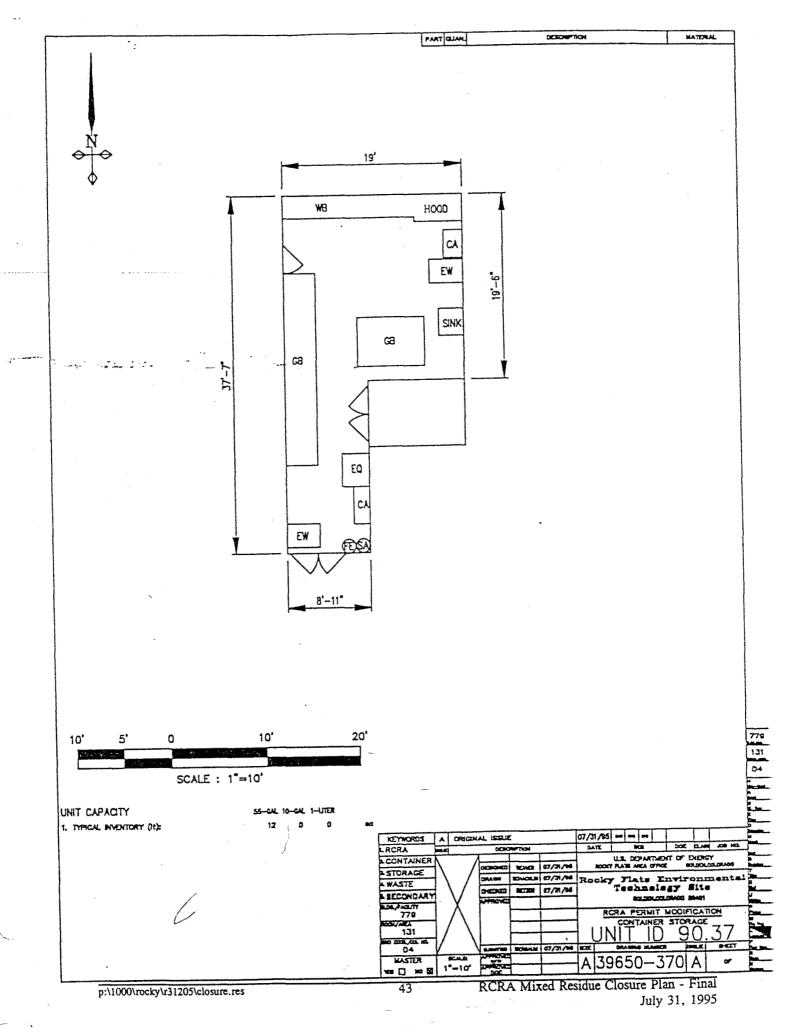
Secondary Containment Type:

Coated Concrete

Drawing Number:

39650-370

- 1. Closure activities will be completed within 180 days starting within 4 months of closure plan approval.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.38

Building:

779

Room:

133

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

330 gallons

Secondary Containment Type:

Coated Concrete

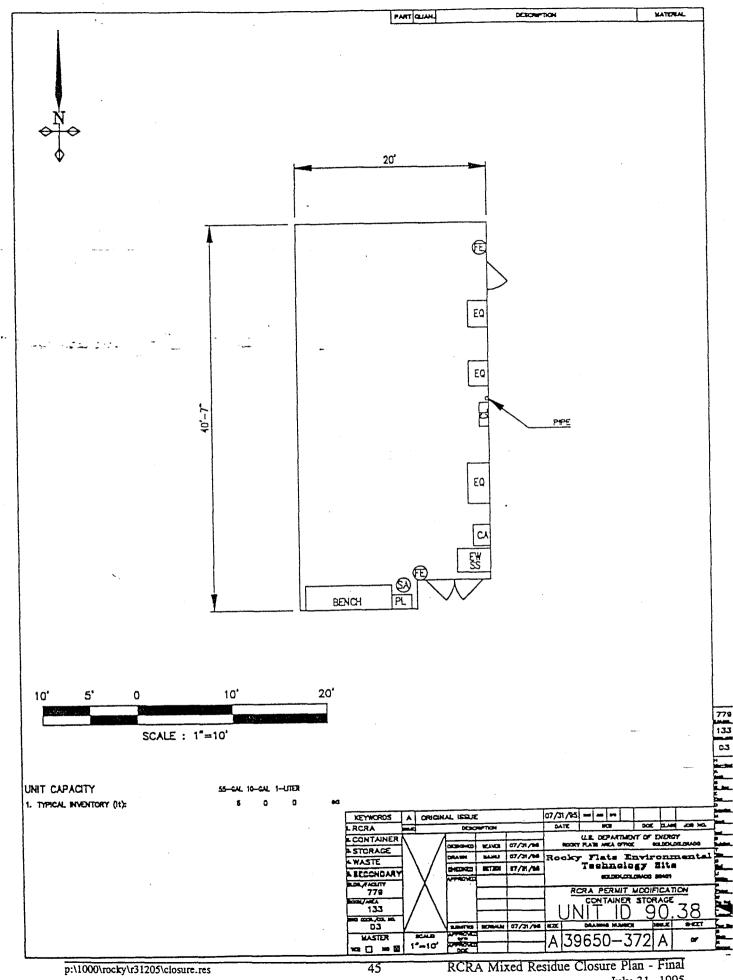
Drawing Number:

39650-372

Unit Specific Information:

1. Closure activities will be completed within 180 days starting within 4 months of closure plan approval.

- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



July 31, 1995

Unit Number:

90.39

Building:

779

Room:

137

Type:

4

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

220 gallons

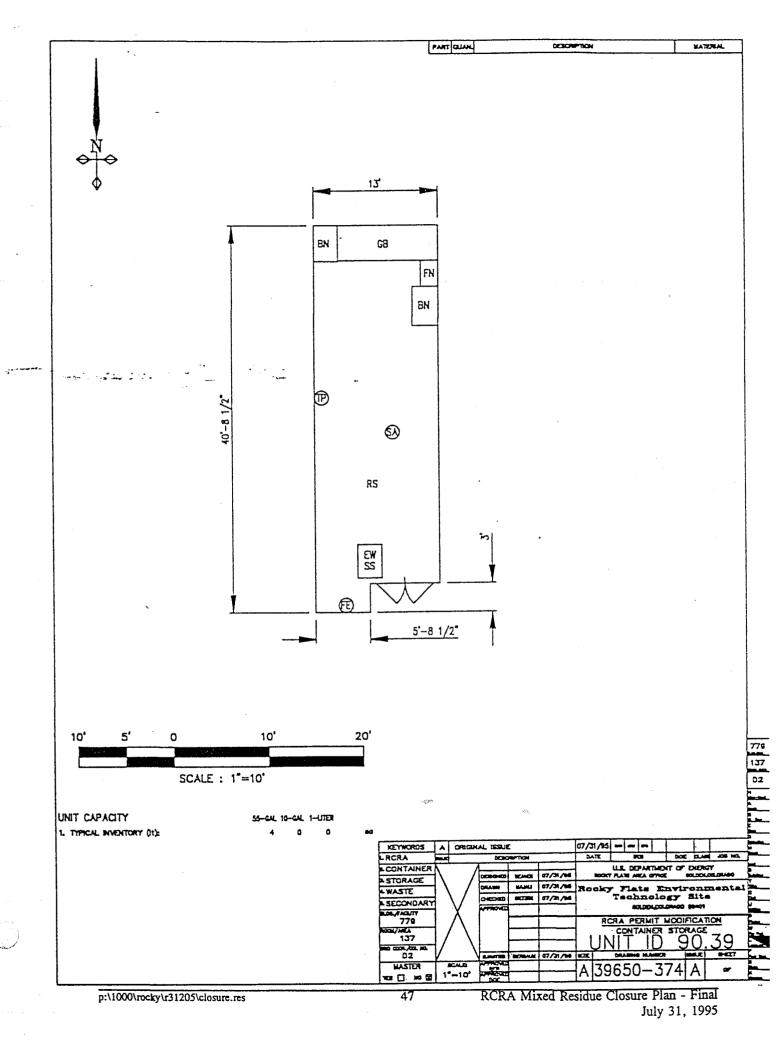
Secondary Containment Type:

Coated Concrete

Drawing Number:

39650-374

- 1. Closure activities will be completed within 180 days starting within 4 months of closure plan approval.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.42

Building:

779

Room:

159

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed Waste

Maximum Capacity:

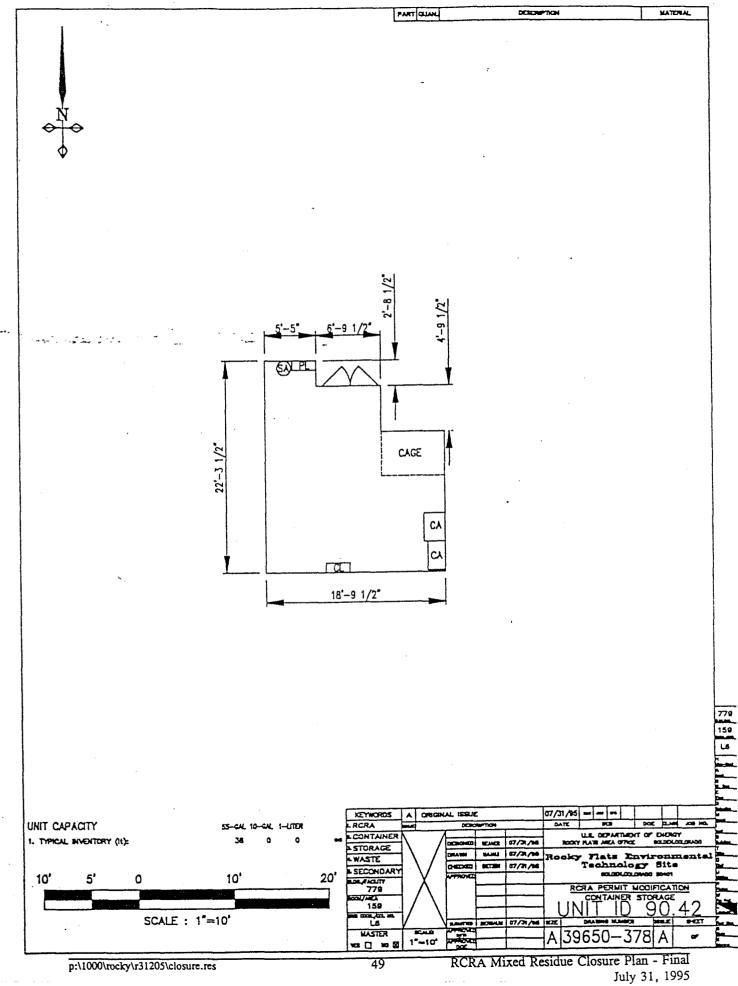
2,090 gallons

Secondary Containment Type: N/A

Drawing Number:

39650-378

- 1. Closure activities will be completed within 180 days starting within 4 months of closure plan approval.
- Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will
 be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance
 standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution. Cleaning of the caged area is not required because this area was not used for storage of hazardous waste and is separated from the rest of the room by a berm.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.43

Building:

779

Room:

160

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed Waste

Maximum Capacity:

1,100 gallons

Secondary Containment Type:

N/A

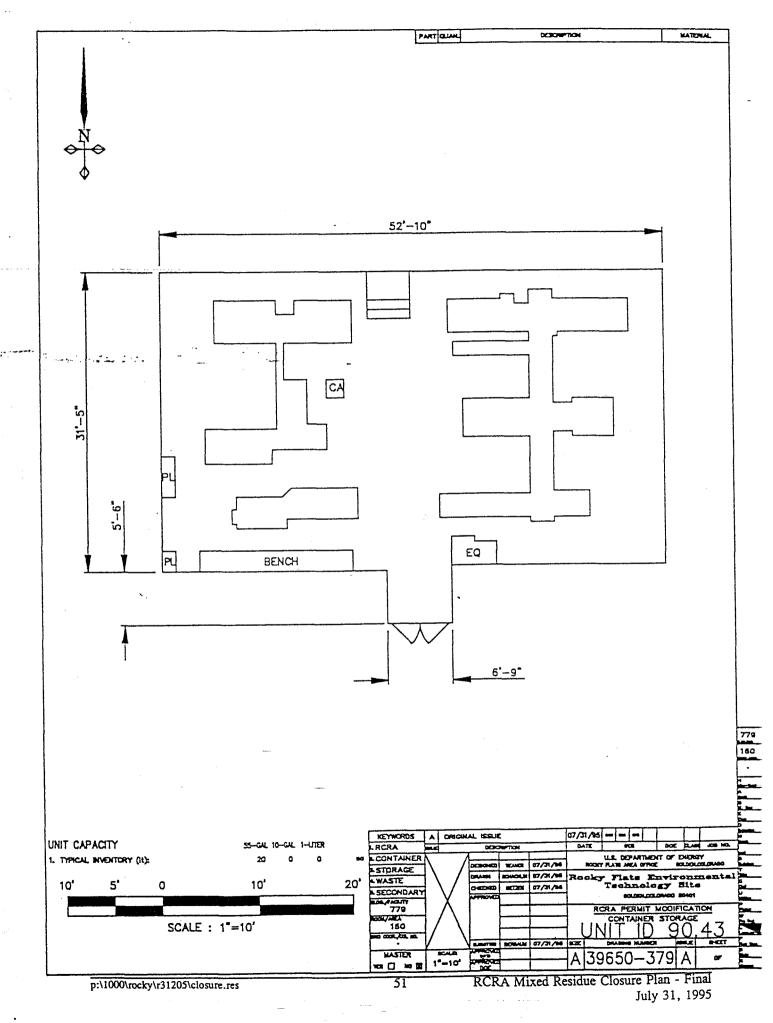
Drawing Number:

39650-379

Unit Specific Information:

1. Closure activities will be completed within 180 days starting within 4 months of closure plan approval.

- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.49

Building:

777

Room:

131

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

5,995 gallons

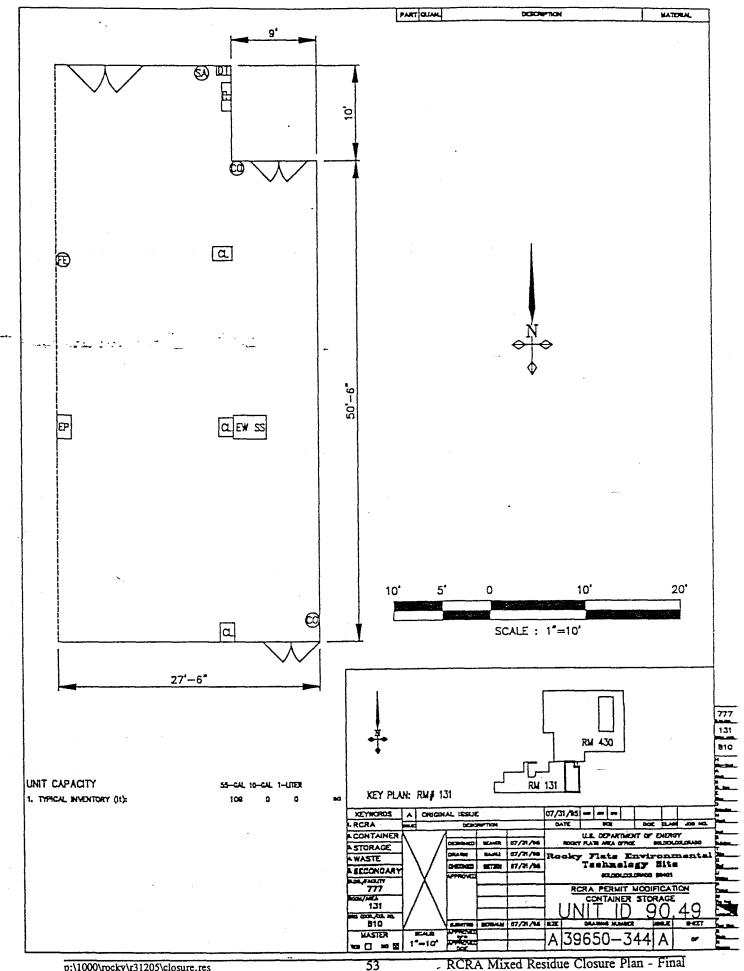
Secondary Containment Type:

Coated Concrete

Drawing Number:

39650-344

- 1. Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems. Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.59

Building:

707

Room:

Module A C-Cell

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

220 gallons

Secondary Containment Type:

Coated Concrete

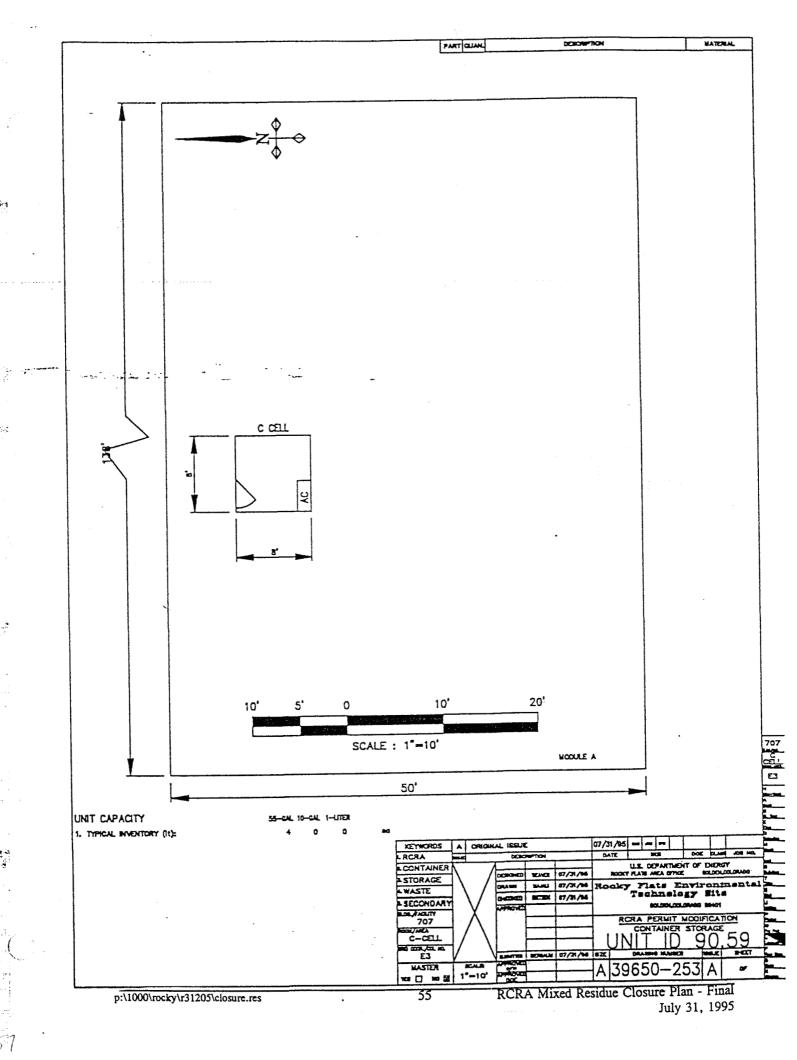
Drawing Number:

39650-253

Unit Specific Information:

- 1. Closure activities will be completed within 180 days following approval of the closure plan.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.

54



Unit Number:

90.60

Building:

707

Room:

G&H Hall

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

5,445 gallons

Secondary Containment Type:

Coated Concrete

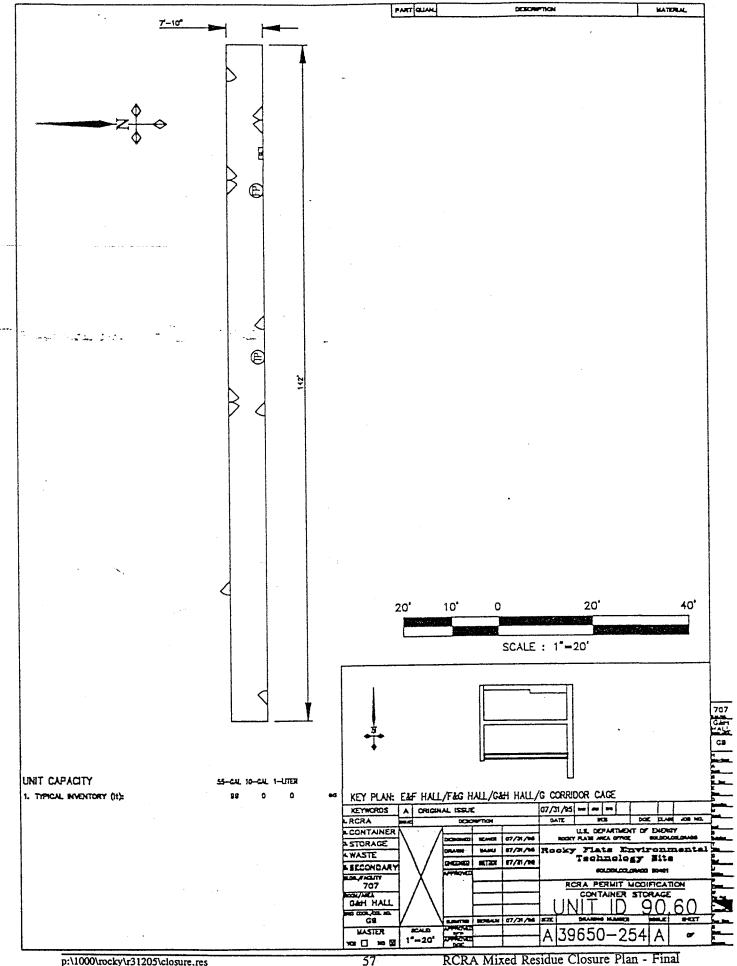
Drawing Number:

39650-254

Unit Specific Information:

1. Closure activities will be completed within 180 days following approval of the closure plan.

- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.61

Building:

707

Room:

F&G Hall

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

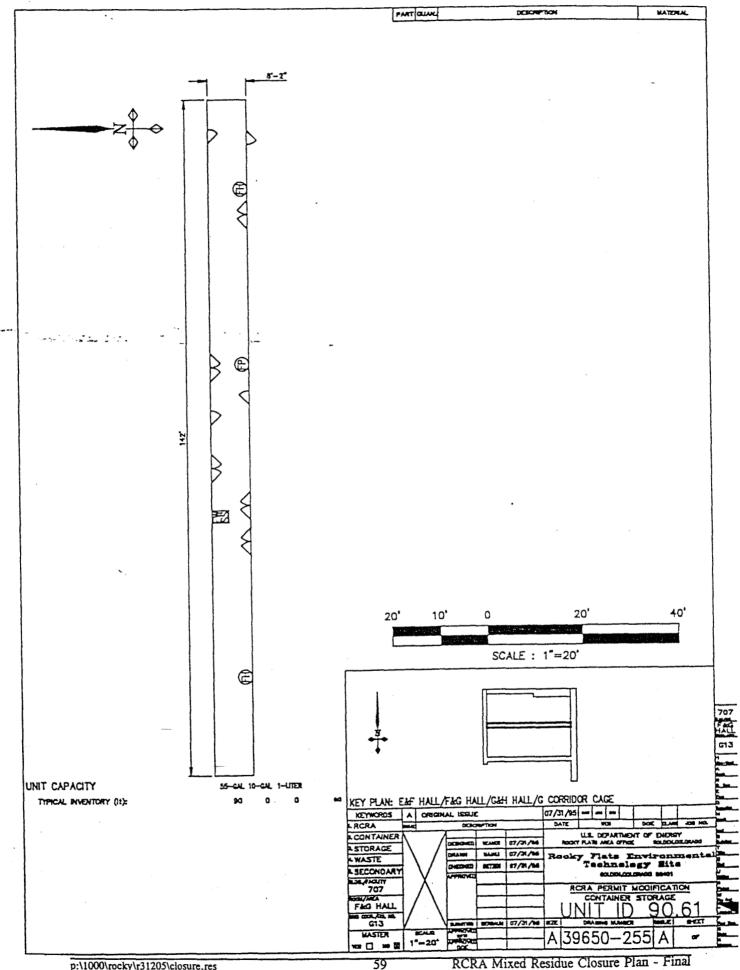
4.950 gallons

Secondary Containment Type: Coated Concrete

Drawing Number:

39650-255

- 1. Closure activities will be completed within 180 days following approval of the closure plan.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetráchloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, с. Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Ъ. Sweep concrete floor to remove dust and debris.
 - Clean the floor using an appropriate decontamination solution. c.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions. d.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard. e.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.71

Building:

371

Room:

3511

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues

Maximum Capacity:

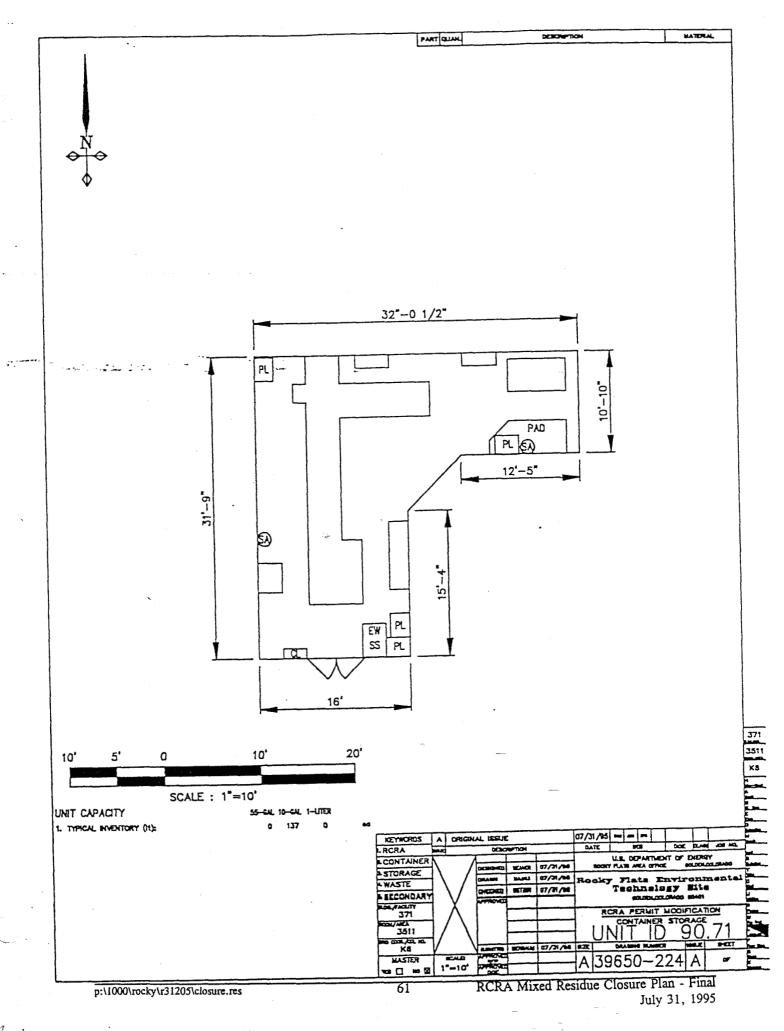
1,370 gallons

Secondary Containment Type: Coated Concrete

Drawing Number:

39650-224

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart b.
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris.
 - Clean the floor using an appropriate decontamination solution.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



1/2

Unit Number:

90.74

Building:

707

Room:

141 (J-Vault)

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues

Maximum Capacity:

203 gallons

Secondary Containment Type:

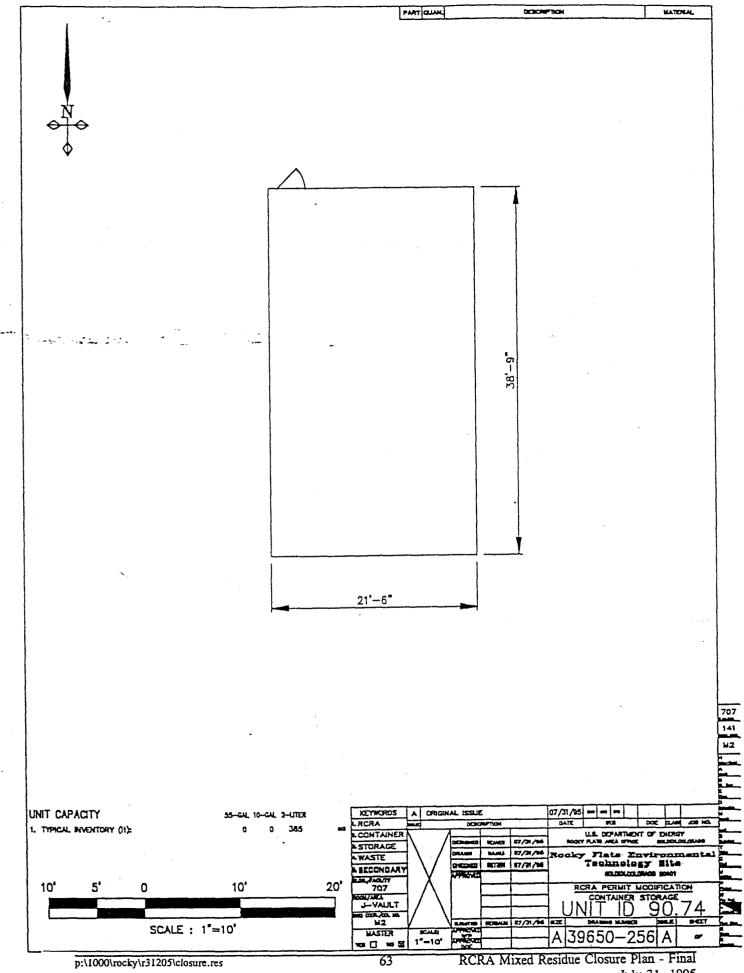
.

N/A

Drawing Number:

39650-256

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



July 31, 1995

Unit Number:

90.82

Building:

771

Room:

188

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues

Maximum Capacity:

39 gallons

Secondary Containment Type:

N/A

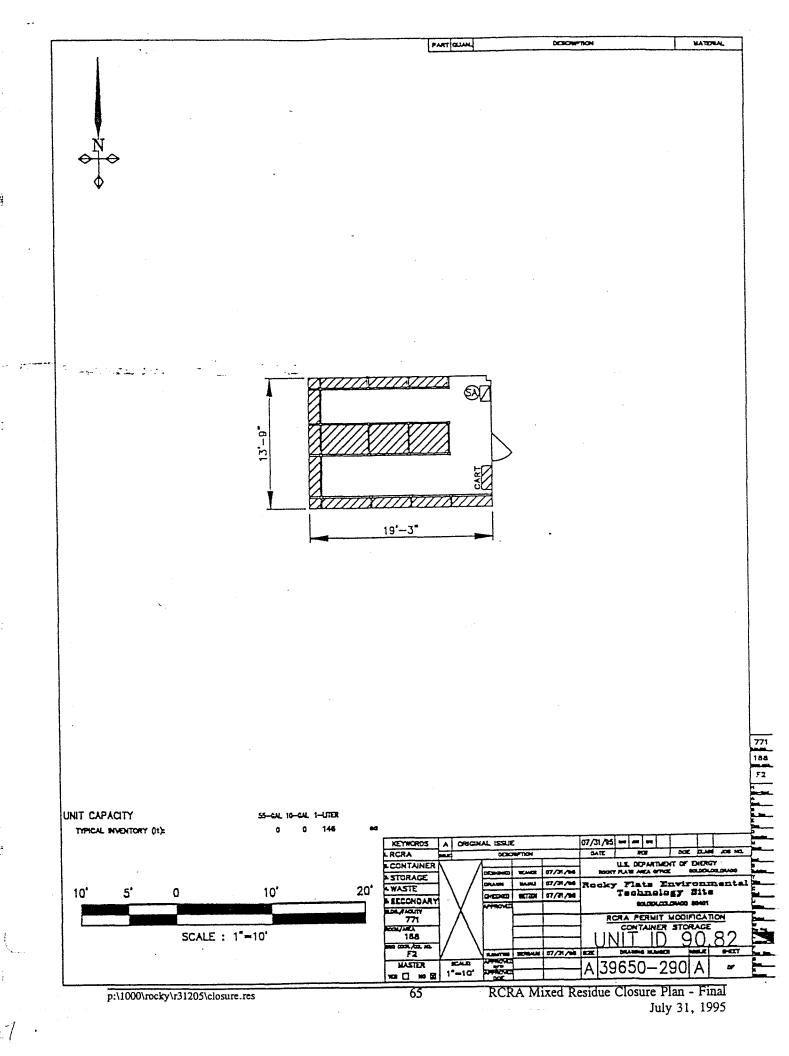
Drawing Number:

39650-290

Unit Specific Information:

p:\1000\rocky\r31205\closure.res

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.84

Building:

771

Room:

180B

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues

Maximum Capacity:

786 gallons

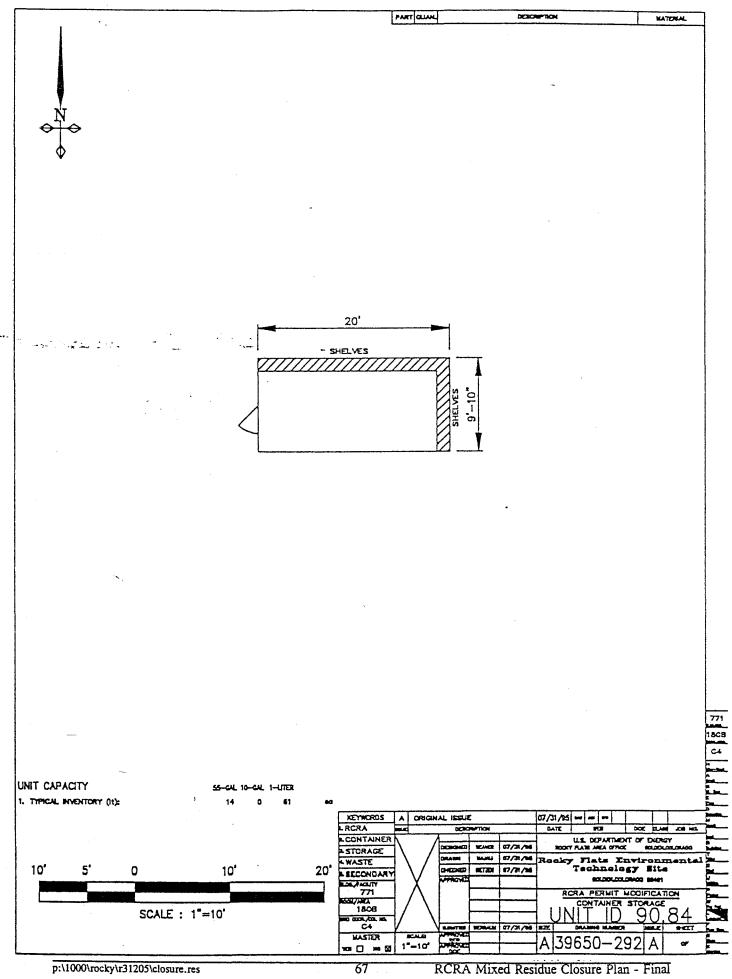
Secondary Containment Type:

N/A

Drawing Number:

39650-292

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will
 be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance
 standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.85

Building:

776

Room:

152

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues

Maximum Capacity:

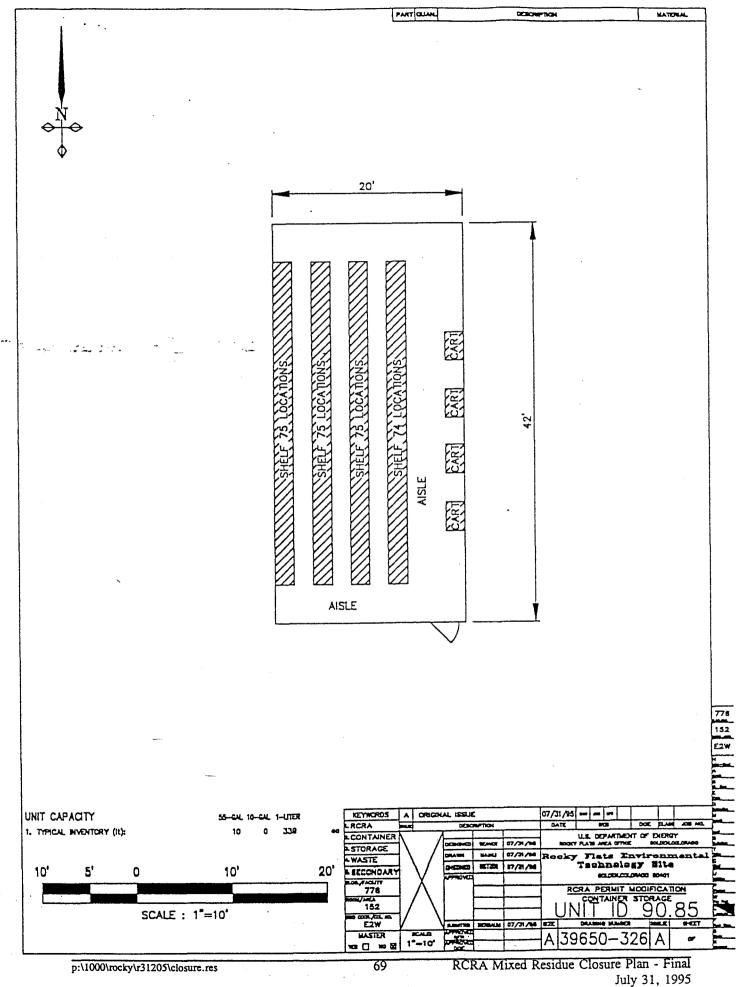
640 gallons

Secondary Containment Type: N/A

Drawing Number:

39650-326

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.92

Building:

779

Room:

160A

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed-Residues, TRU Mixed Waste, and Low Level Mixed Waste

Maximum Capacity:

70 gallons

Secondary Containment Type:

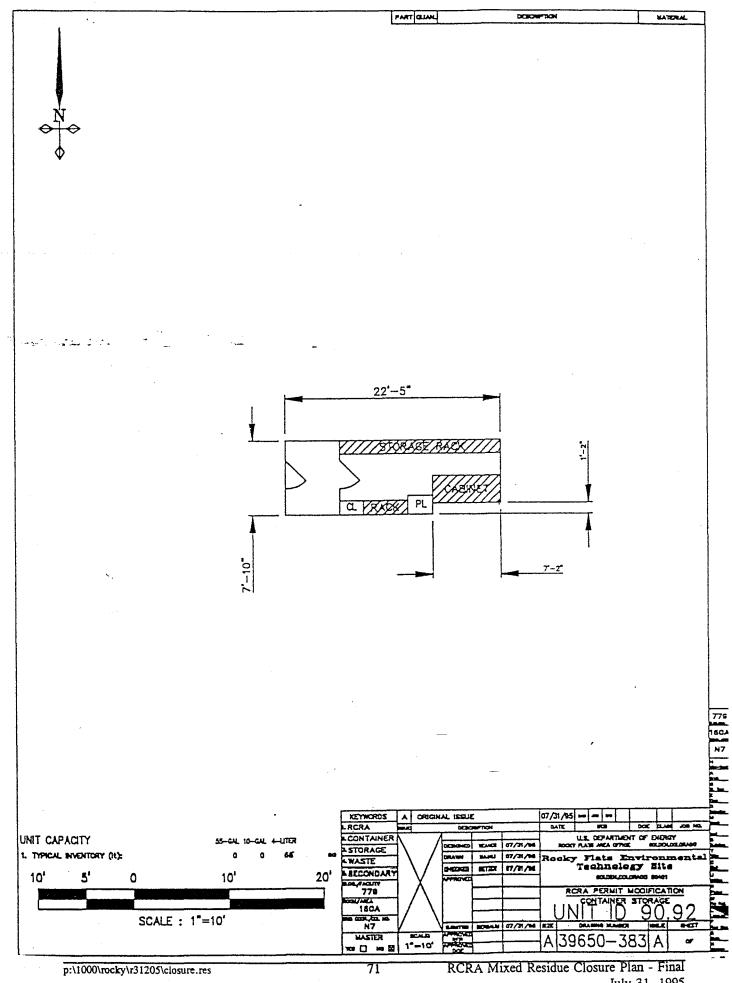
.

N/A

Drawing Number:

39650-383

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.94

Building:

371

Room:

3331

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues

Maximum Capacity:

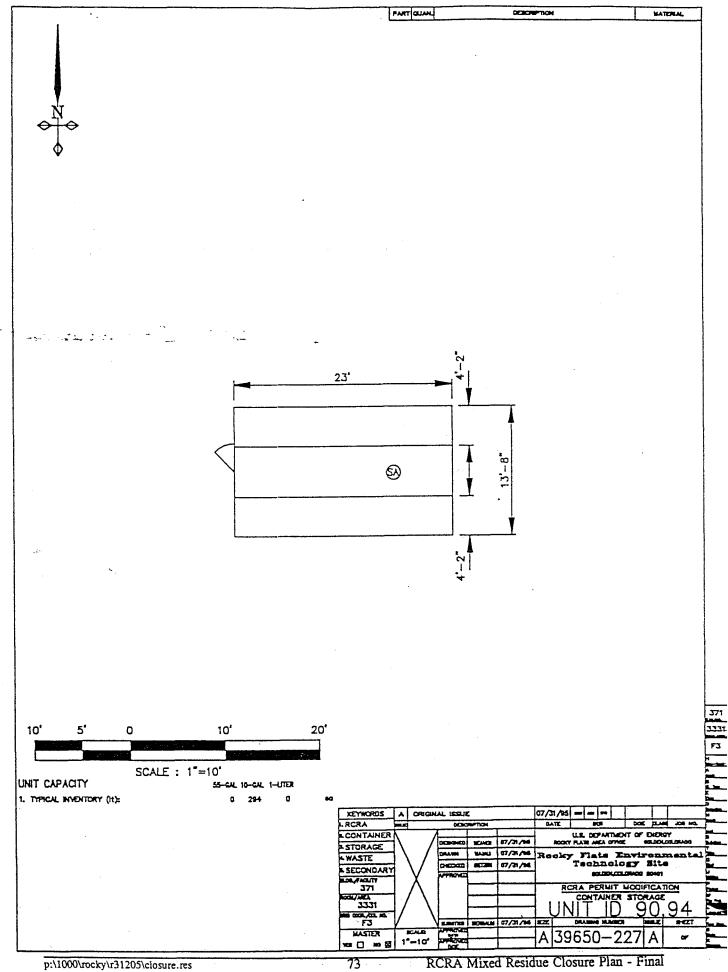
2,940 gallons

Secondary Containment Type: Coated Concrete

Drawing Number:

39650-227

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard. e.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.95

Building:

371

Room:

3327

Type:

Vault

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues

Maximum Capacity:

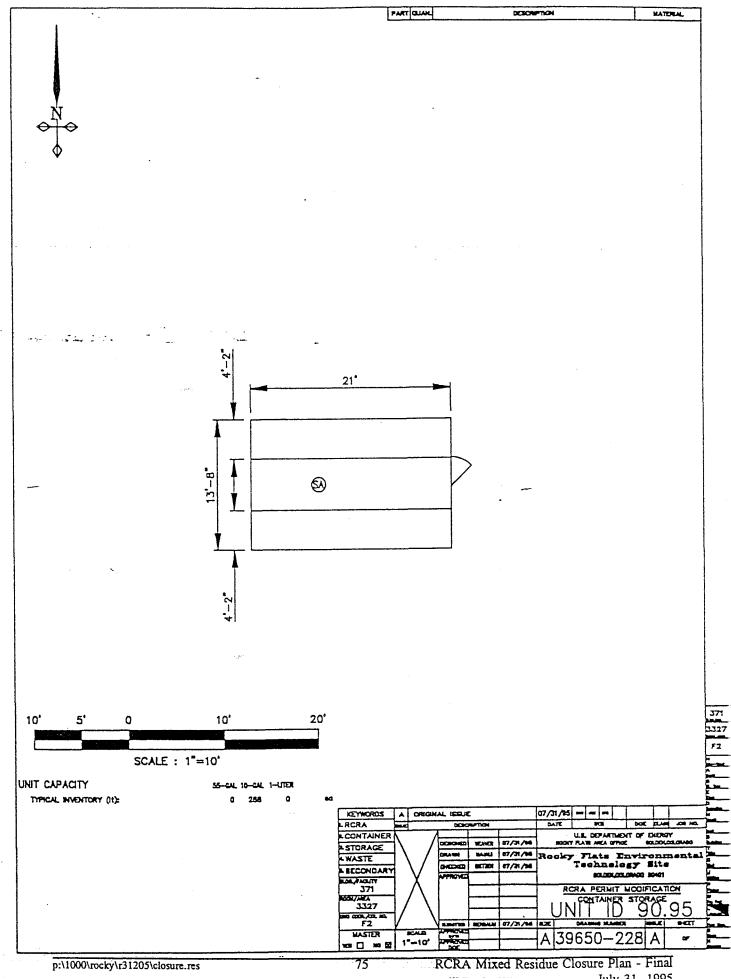
2,880 gallons

Secondary Containment Type: Coated Concrete

Drawing Number:

39650-228

- 1. Initiation of closure is deferred because this unit is being used for storage of Special Nuclear Material. Closure of this unit will commence when the unit ceases to be used for storage of Special Nuclear Material so that additional moves of Special Nuclear Material, resulting in increased worker exposure, are not necessary.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris.
 - Clean the floor using an appropriate decontamination solution.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.97

Building:

771

Room:

147

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed Waste

Maximum Capacity:

7 gallons

Secondary Containment Type:

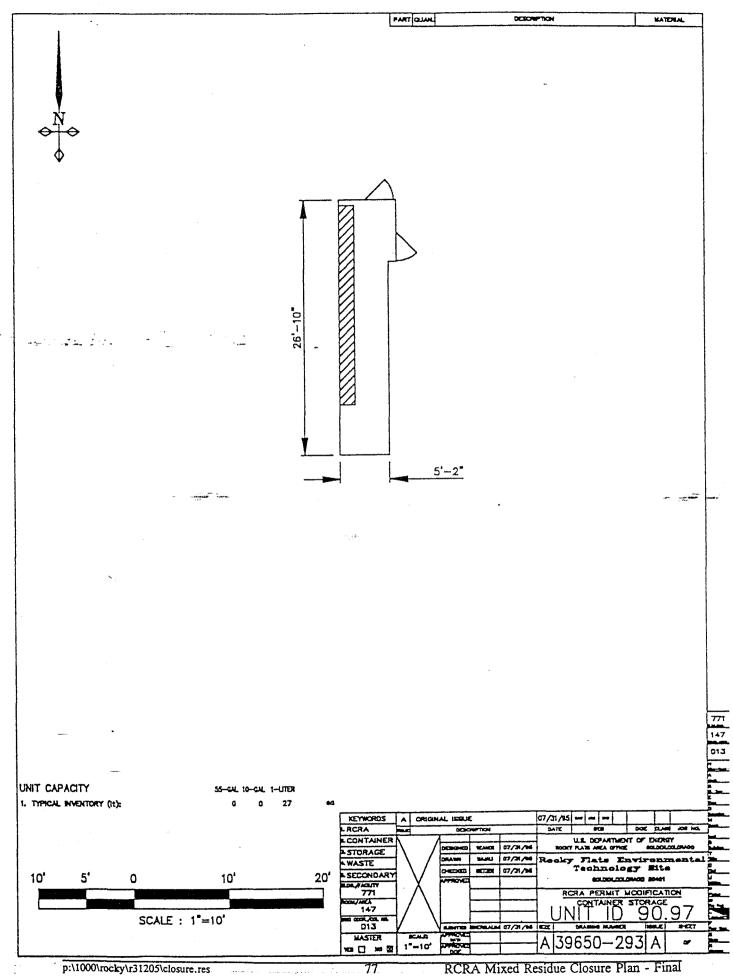
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N/A

Drawing Number:

39650-293

- 1. Closure will be completed within 360 days starting within one year of closure plan approval due to inventory consolidation issues and the necessity to clean three-dimensional container storage bins.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C. and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor and storage bins using an appropriate decontamination solution.
 - d. Rinse the floor and storage bins and collect all rinsate solution for a total of three repetitions.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.99

Building:

776

Room:

127 Basement

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

12,210 gallons

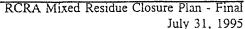
Secondary Containment Type:

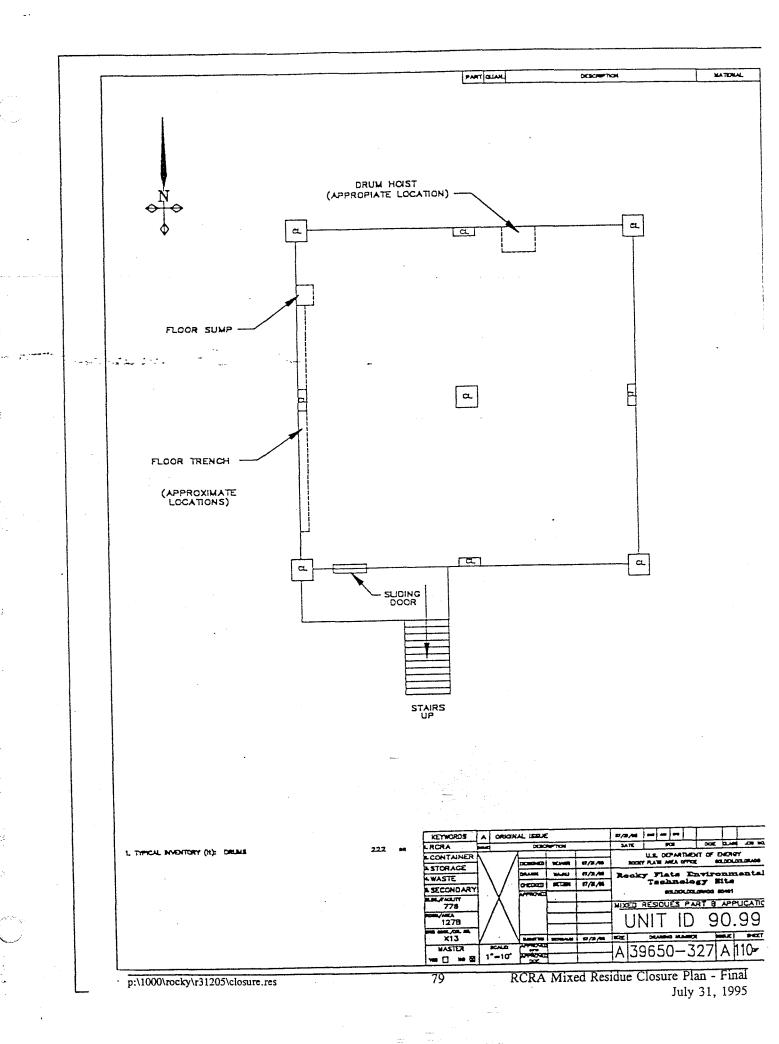
Coated Concrete

Drawing Number:

39650-327

- 1. Initiation of closure is deferred until future decontamination and decommissioning of the facility, to prevent future re-contamination of the unit.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, c. Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris. b.
 - Clean the floor using an appropriate decontamination solution.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions. d.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.





Unit Number:

90.102

Building:

559

Room:

103

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

287 gallons

Secondary Containment Type:

Glovebox

Drawing Number:

39650-245

Unit Specific Information:

1. Closure activities will be completed within 180 days starting within 4 months of closure plan approval.

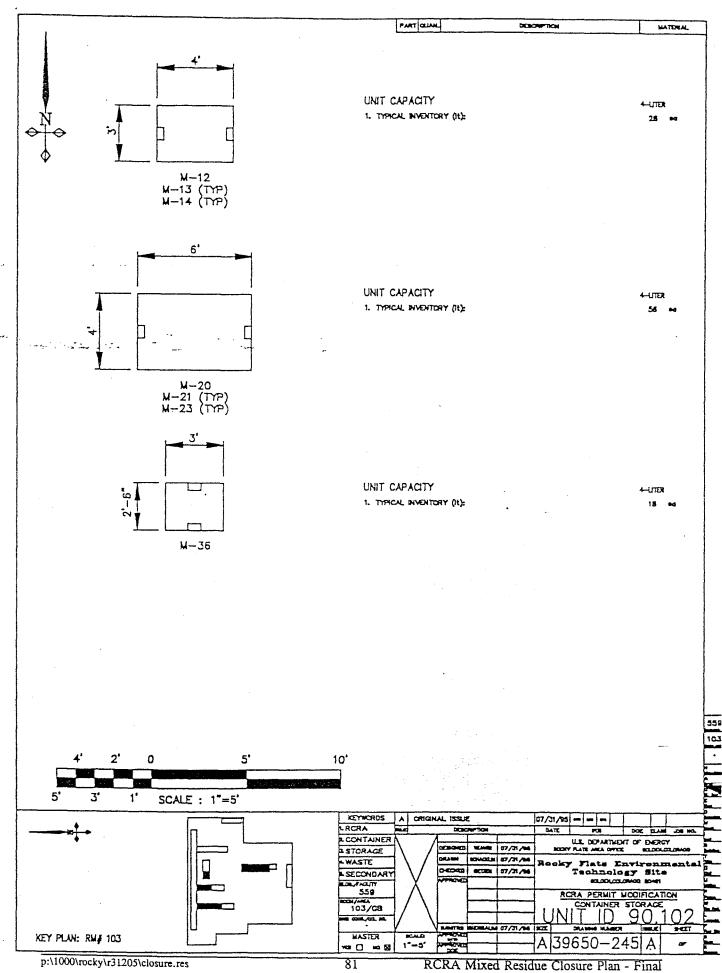
2. Wastes stored in this unit include characteristic wastes, but not listed wastes.

3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:

a. Remove waste inventory and other materials from the unit.

b. Inspect the glovebox surface to determine if it is clean and dry.

c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.



July 31, 1995

Unit Number:

90.104

Building:

371

Room:

3305

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

2,695 gallons

Secondary Containment Type:

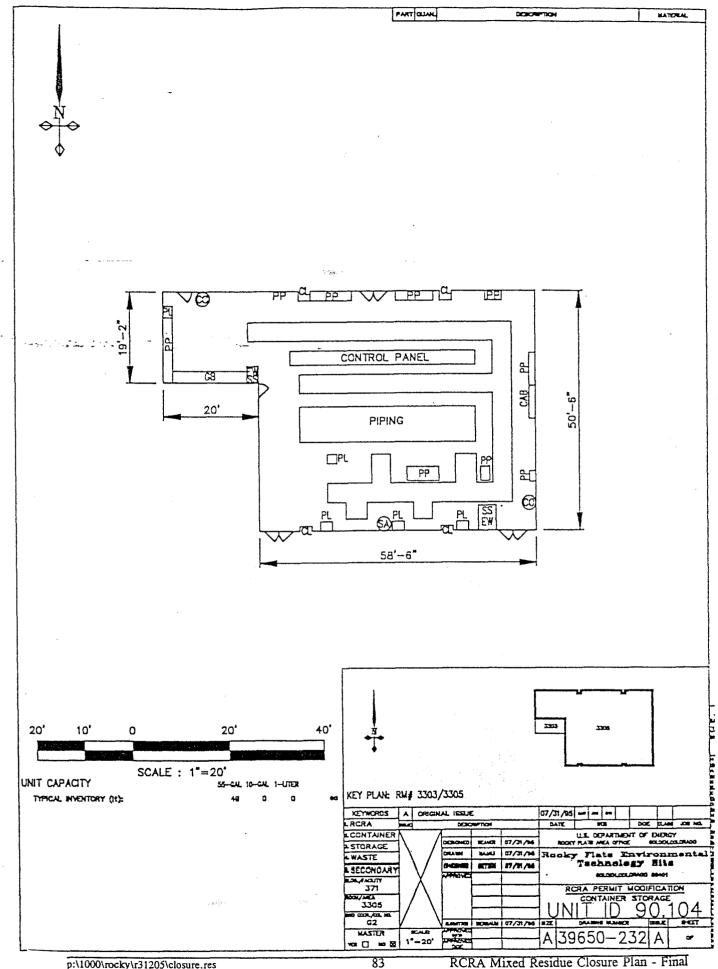
Coated Concrete

Drawing Number:

39650-232

- 1. Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems. Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will
 be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance
 standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C, and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.





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RCRA Mixed Residue Closure Plan - Final July 31, 1995

Unit Number:

90.104

Building:

371

Room:

3305

Type:

er () Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

1 gallons

Secondary Containment Type:

Glovebox

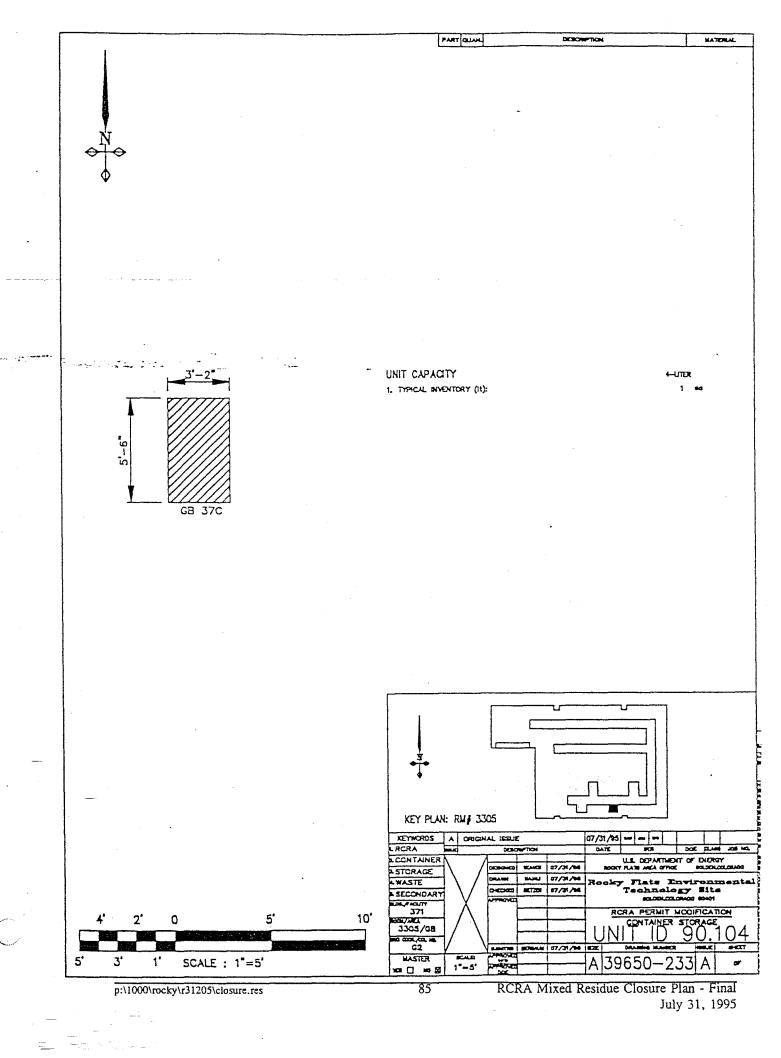
Drawing Number:

39650-233

Unit Specific Information:

1. Initiation of closure is deferred until future decontamination and decommissioning of the glovebox, as hazardous re-contamination by rusting equipment within the glovebox is highly probable.

- 2. Closure of this unit will be affected by dismantlement of the glovebox and its removal from the facility.
- 3. Wastes stored in this unit included characteristic wastes, but not listed wastes.
- 4. The following closure activities are anticipated at the initiation of decontamination and decommissioning:
 - a. Remove remaining waste inventory and other materials from the unit.
 - b. Wipe or otherwise clean the glovebox surface until it is clean and dry.



÷ 64

Unit Number:

90.114

Building:

771

Room:

146

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

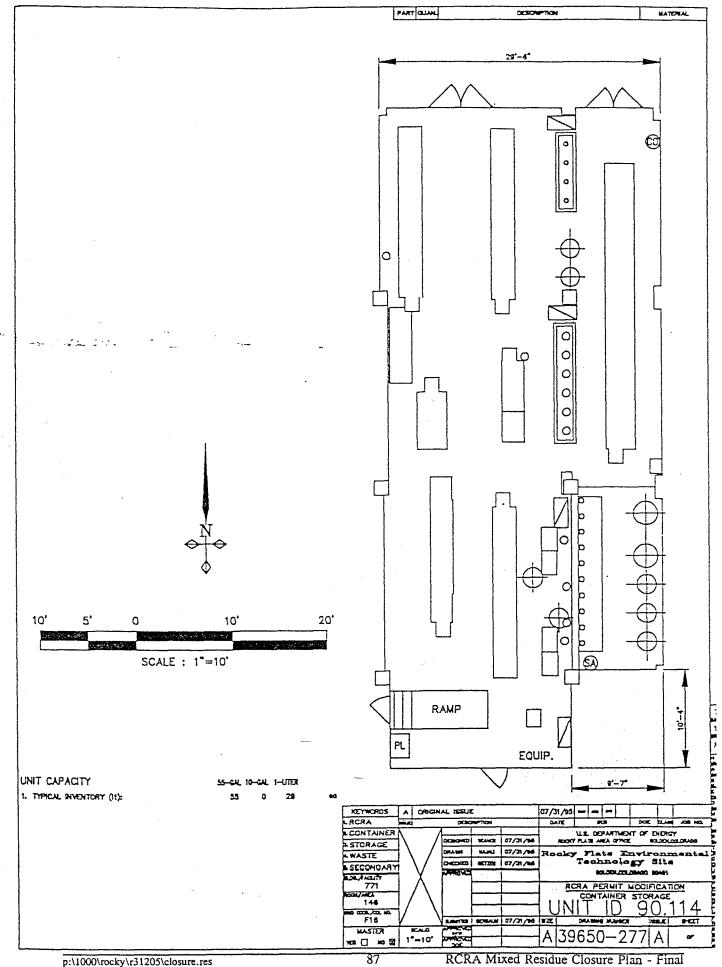
......3,033 gallons

Secondary Containment Type: Coated Concrete

Drawing Number:

39650-277

- 1. Initiation of closure is deferred because this unit contains piping for one or more hazardous waste tank systems. Closure of this unit will commence after the hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit included characteristic wastes, but not listed wastes.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C. and
 - Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - Remove waste inventory from the unit, if not already removed.
 - Sweep concrete floor to remove dust and debris. b.
 - Clean the floor using an appropriate decontamination solution. ¢.
 - Rinse the floor and collect all rinsate solution for a total of three repetitions. d.
 - Sample and analyze the third rinsate solution; compare results to closure performance standard. e.
 - If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



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July 31, 1995

Unit Number:

90.114

Building:

771

Room:

146

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

908 gallons

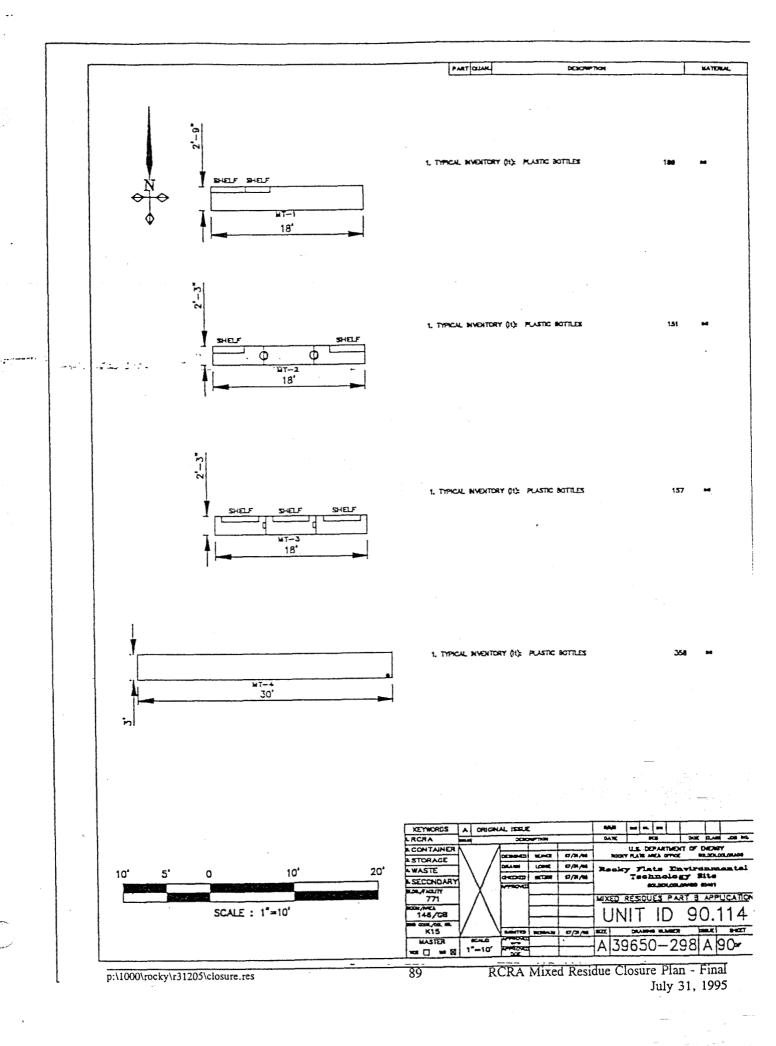
Secondary Containment Type:

Glovebox

Drawing Number:

39650-298

- 1. Initiation of closure is deferred due to the role of the glovebox unit as secondary containment for hazardous waste tanks and ancillary piping. Closure of this unit will commence after hazardous waste piping in this room is removed in order to avoid duplicate cleaning of the floor, which would lead to increased worker exposure and additional generation of waste.
- 2. Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:
 - a. Remove waste inventory and other materials from the unit.
 - b. Inspect the glovebox surface to determine if it is clean and dry.
 - c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.



Unit Number:

90.138

Building:

771

Room:

154

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

8 gallons

Secondary Containment Type:

Glovebox

Drawing Number:

39650-308

Unit Specific Information:

1. Closure activities will be completed within 180 days starting within 8 months of closure plan approval.

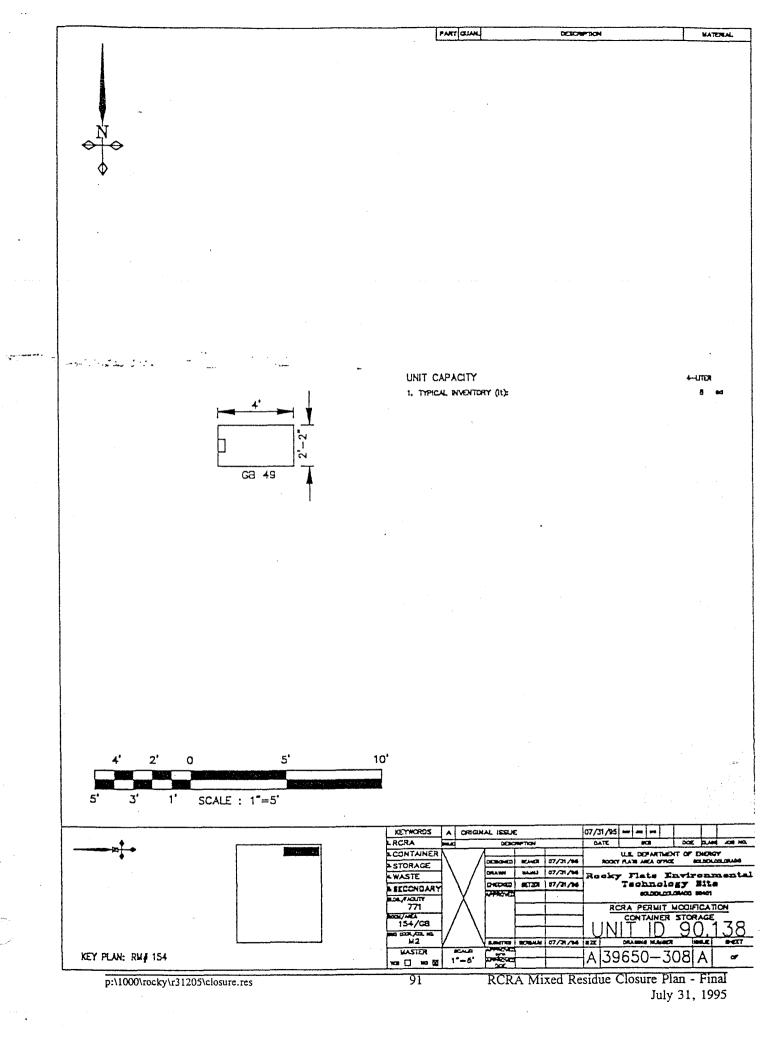
2. Wastes stored in this unit included characteristic wastes, but not listed wastes.

3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:

a. Remove waste inventory and other materials from the unit.

b. Inspect the glovebox surface to determine if it is clean and dry.

c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.



Unit Number:

90.139

Building:

771

Room:

158

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

30 gallons

Secondary Containment Type:

Glovebox

Drawing Number:

39650-309

Unit Specific Information:

1. Closure activities will be completed within 180 days starting within 8 months of closure plan approval.

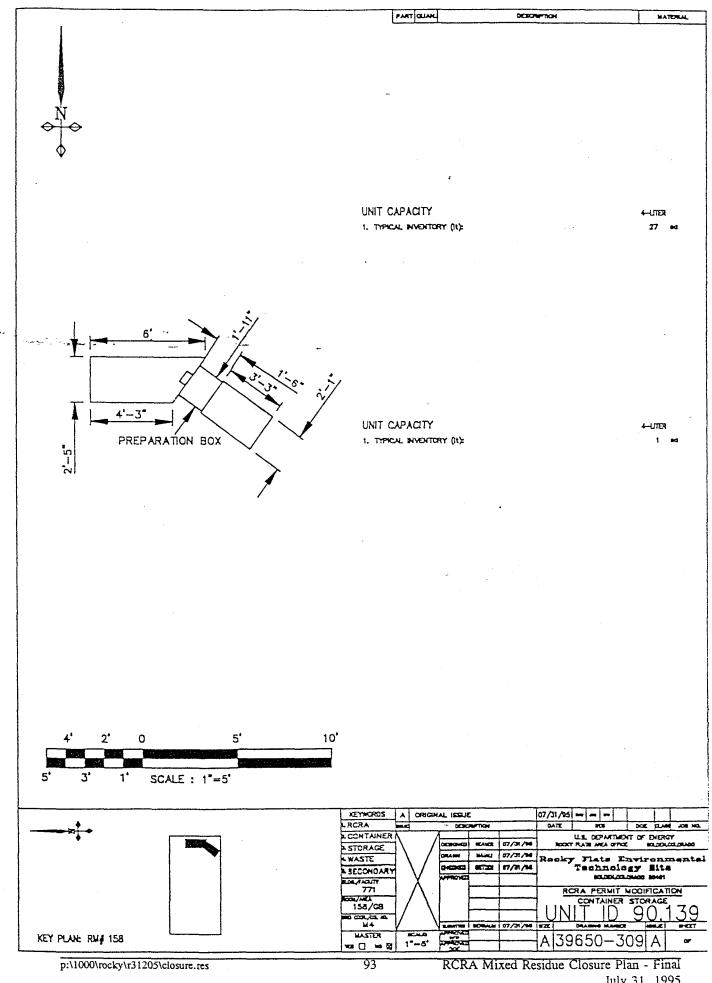
2. Wastes stored in this unit included characteristic wastes, but not listed wastes.

3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:

a. Remove waste inventory and other materials from the unit.

b. Inspect the glovebox surface to determine if it is clean and dry.

c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.



Unit Number:

90.140

Building:

771

Room:

159

Type:

Room

Unit Description:

Indoor Container Storage Room

Waste Description:

Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed Waste

Maximum Capacity:

220 gallons

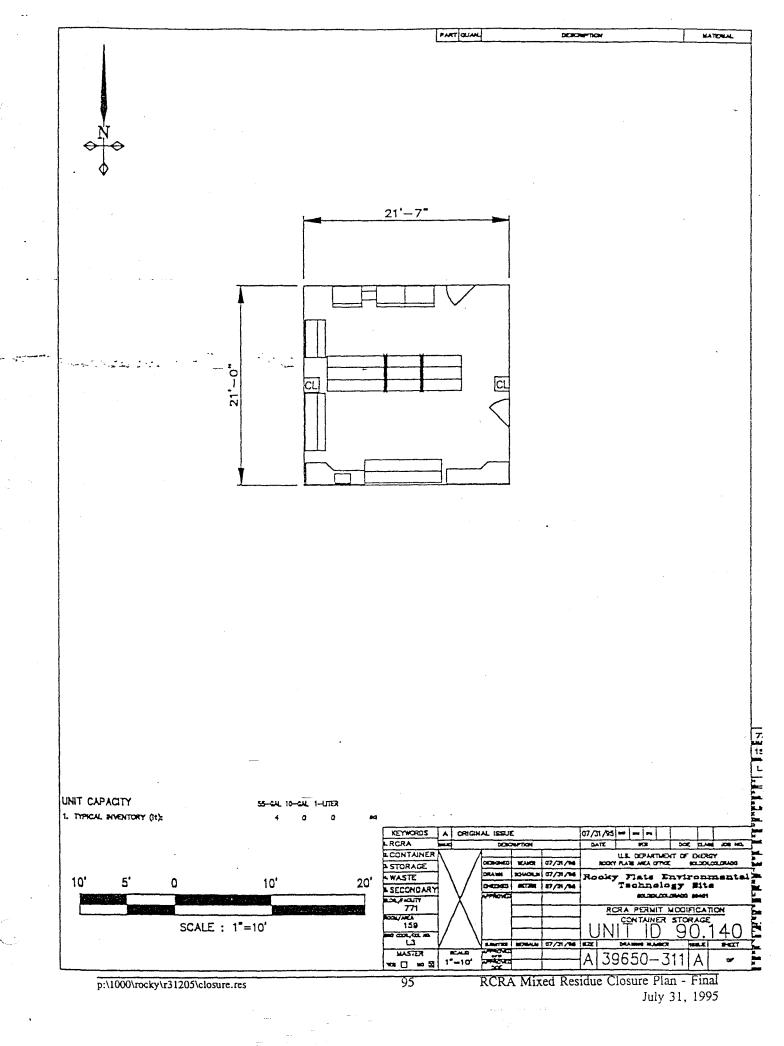
Secondary Containment Type:

NUA

Drawing Number:

39650-311

- 1. Closure activities will be completed within 180 days starting within 8 months of closure plan approval.
- Wastes stored in this unit may have included both characteristic and listed wastes. Closure rinsate samples will be analyzed for the volatile organic compounds and the RCRA TCLP metals listed in the closure performance standard.
- 3. Anticipated closure activities will be performed in a manner to achieve the objectives of the closure performance standard:
 - a. Non-detectable levels of organic hazardous constituents (benzene, carbon tetrachloride, tetrachloroethylene, methylene chloride, toluene, methyl ethyl ketone, 1,1,1-trichloroethane and trichloroethylene), and
 - b. Failure to exhibit any characteristic of a hazardous waste, as defined in 6 CCR 1007-3, Part 261, Subpart C. and
 - c. Levels of Toxicity Characteristic (TC) metals (i.e., Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver) are at or below the background level in the unused rinsate solution.
- 4. Anticipated closure activities are expected to include the following as outlined in Section B of this Plan:
 - a. Remove waste inventory from the unit, if not already removed.
 - b. Sweep concrete floor to remove dust and debris.
 - c. Clean the floor using an appropriate decontamination solution.
 - d. Rinse the floor and collect all rinsate solution for a total of three repetitions.
 - e. Sample and analyze the third rinsate solution; compare results to closure performance standard.
 - f. If analytical results for used rinsate solution are above the closure performance standard, decide whether to continue rinsing or to apply for post-closure care authorization.



Unit Number:

90.140

Building:

771

Room:

159

Type:

Glovebox

Unit Description:

Glovebox

Waste Description:

Liquid and Solid Mixed Residues, TRU Mixed Waste, and Low Level Mixed

Waste

Maximum Capacity:

6 gallons

Secondary Containment Type:

Glovebox

Drawing Number:

39650-310

Unit Specific Information:

1. Closure activities will be completed within 180 days starting within 8 months of closure plan approval.

2. Wastes stored in this unit included characteristic wastes, but not listed wastes.

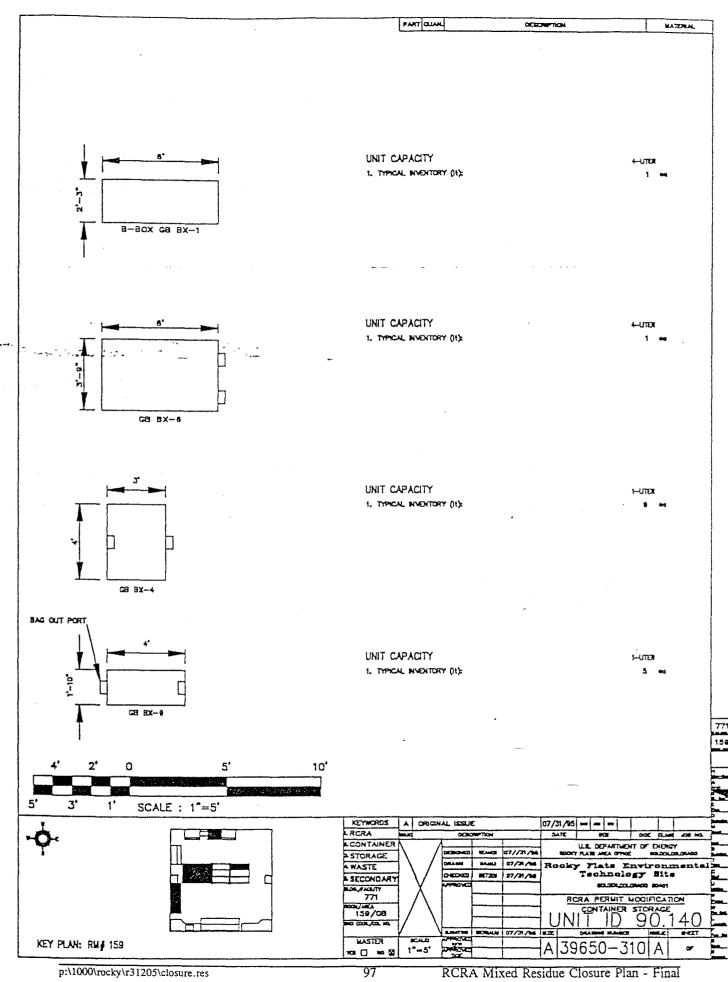
3. Anticipated closure activities are expected to include the following as outlined in Section B of this plan:

a. Remove waste inventory and other materials from the unit.

b. Inspect the glovebox surface to determine if it is clean and dry.

c. If the surface is not clean and dry, wipe or otherwise clean the glovebox surface until it is clean and dry.





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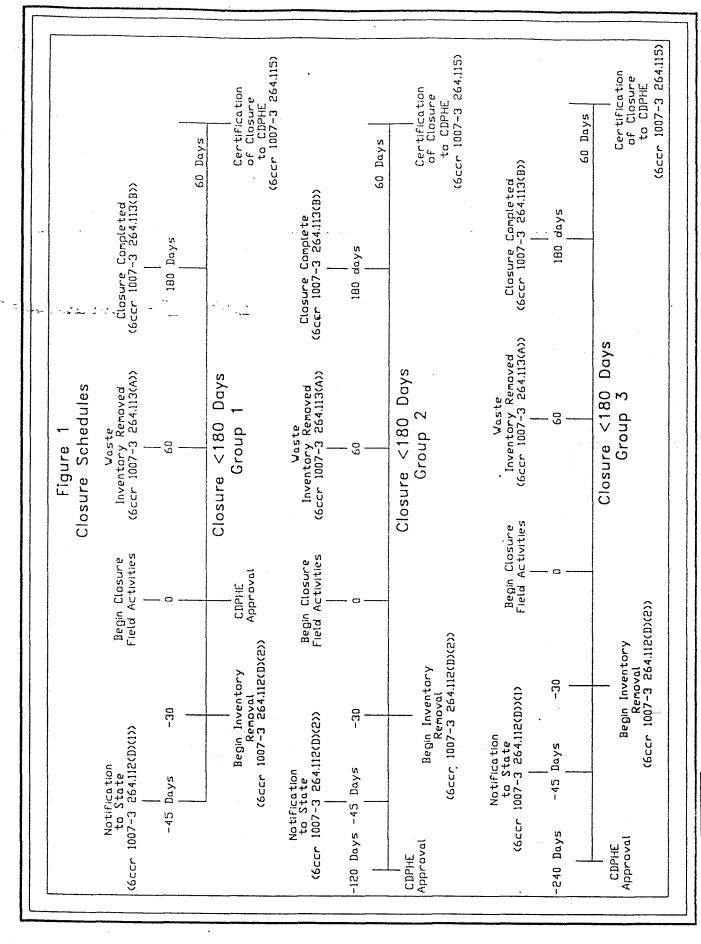
Table 1
Unit-Specific Closure Information

RCRA Unit ID	Bldg. No.	Room No.	- Unit Type	Typical Number of Personnel Required for Closure	Estimated Time Required for Closure (days)
Unit 90.3	371	3337	Indoor Storage	4	180 Group 1
Unit 90.28	707	E&F Hallway	Indoor Storage	4	180 Group 1
Unit 90.29	559	101	Glovebox	4	180 Group 2
Unit 90.37	.779	131	Indoor Storage	4	180 Group 2
Unit 90.38	779	133	Indoor Storage	4	180 Group 2
Unit 90.39	779	137	Indoor Storage	4	180 Group 2
Unit 90.42	779	159	Indoor Storage	4	180 Group 2
Unit 90.43	779	160	Indoor Storage	4	180 Group 2
Unit 90.59	707	Module A C-Cell	Indoor Storage	4	180 Group 1
Unit 90.60	707	G&H Hall	Indoor Storage	4	180 Group 1
Unit 90.61	707	F&G Hall	Indoor Storage	4	180 Group 1
Unit 90.102	559	103	Glovebox	4	180 Group 2
Unit 90.138	771	154	Glovebox	4 .	180 Group 3
Unit 90.139	771	158	Glovebox	4	180 Group 3
Unit 90.140	771	159	Indoor Storage	4	180 Group 3
Unit 90.140	771	159	Glovebox	4	180 Group 3
Ünit 90.31	771	179	Indoor Storage	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	360 Group 4
Unit 90.34	771	249	Indoor Storage	4 10 30 20 20 20 20 20 20 20 20 20	360 Group 4
Unit 90.97	771	147	Indoor Storage	4 *************************************	360 Group 4
Unit 90.4	371	3543	Indoor Storage	4	Deferral Group 5
Unit 90.8	371	3567A	Indoor Storage	4	Deferral Group 5
Unit 90.12	371	1101	Indoor Storage	4	Deferral Group 5
Unit 90.14	371	1111	Indoor Storage	4	Deferral Group 5
Unit 90.15	371	1208	Indoor Storage	4	Deferral Group 5
Unit 90.19	371	1115	Indoor Storage	4	Deferral Group 5
Unit 90.21	771	149	Indoor Storage	4.	Deferral Group 5
Unit 90.21	771	149	Glovebox	4	Deferral Group 5
Unit 90.22	771	114	Indoor Storage	4	Deferral Group 5
Unit 90.22	771	114	Glovebox	4	Deferral Group 5
Unit 90.49	777	131	Indoor Storage	4	Deferral Group 5
Unit 90.71	371	3511	Indoor Storage	4	Deferral Group 5
Unit 90.74	707	141 (J-Vault)	Indoor Storage	4	Deferral Group 5
Unit 90.82	771	188	Indoor Storage	4	Deferral Group 5

Table 1 (continued) Unit-Specific Closure Information

RCRA Unit ID	Bldg. No.	Room No.	Unit Type	Typical Number of Personnel Required for Closure	Estimated Time Required for Closure (days)
Unit 90.84	771	180B	Indoor Storage	4	Deferral Group 5
Unit 90.85	776	152	Indoor Storage	4	Deferral Group 5
Unit 90.92	779	160A	Indoor Storage	4	Deferral Group 5
Unit 90.94	371	3331	Indoor Storage	4	Deferral Group 5
Unit 90.95	371	3327	Indoor Storage	4	Deferral Group 5
Unit 90.99	776	127 Basement	Indoor Storage	4	Deferral Group 5
Unit 90.104	371	3305	Indoor Storage	4	Deferral Group 5
Unit 90.104	371	3305	Glovebox	4	Deferral Group 5
Unit 90.114	771	146	Indoor Storage	4	Deferral Group 5
Unit 90.114	771.	146	Glovebox	4	Deferral Group 5

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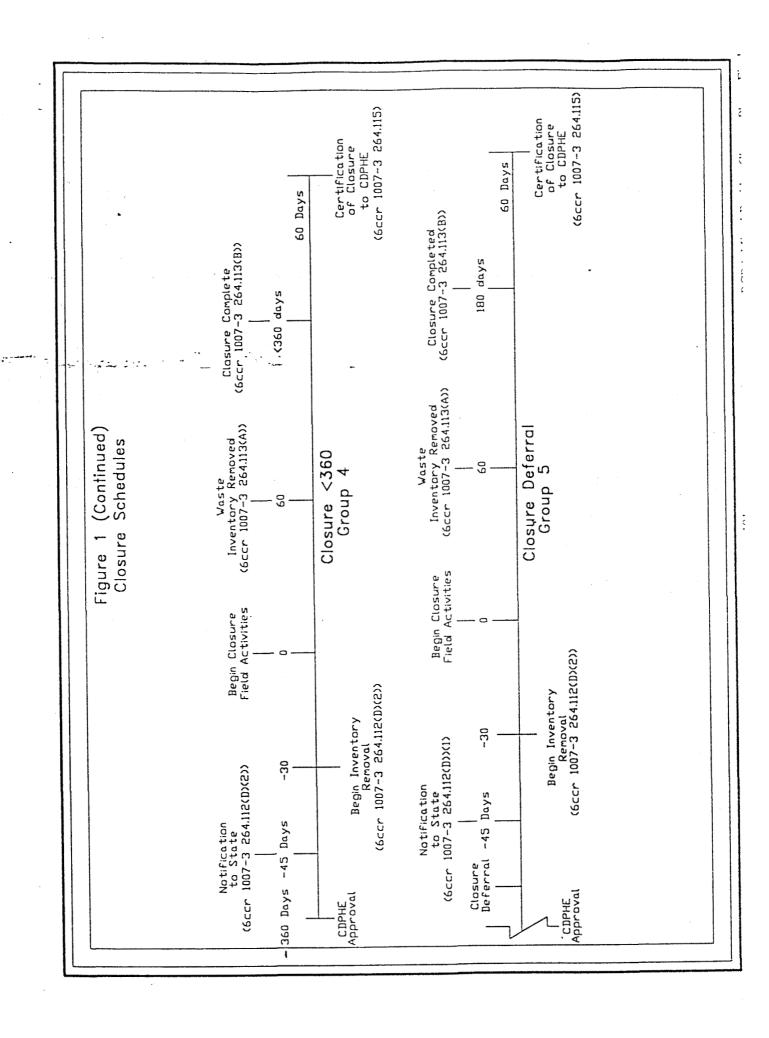
RCRA Mixed Residue Closure Plan - Final

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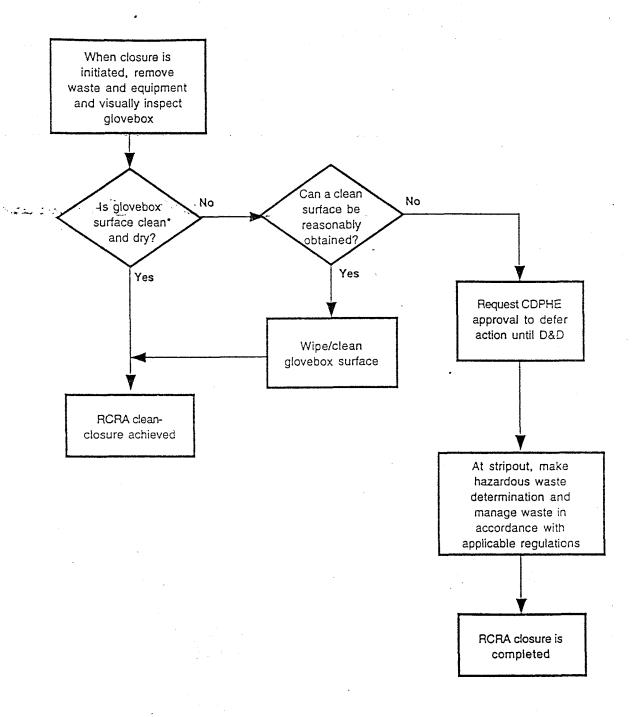
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Figure 2 Glovebox RCRA Closure Decision Flow Diagram



^{*} A clean surface will be defined as free of all visible hazardous waste or contamination, except that residual staining consisting of slight streaks or minor discoloration, and waste in cracks, crevices, and pits limited to 5 percent of each square inch may be present.



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